

From The STAFF

W.T.F.D.A. Headquarters, P.O. Box 514, Buffalo, NY 14205

THINK SPRING...It arrives this month, believe it or not. For most club members, it may have seemed like a long winter, but the end is in sight. February proved to be surprisingly active for TV and FM DX to some W.T.F.D.A.ers. Word has it that tropo activity was quite a bit better than expected in some areas, with some ducting in the Midwest to 500 miles and beyond on UHF taking place about the time this is being written. Also, a massive auroral opening was noted by DXers around the 8th of February, and indications are that it was one of the best in years, with effects noted even in southerly areas. This one made headlines, and one Associated Press item on it appears on page 33.

"ALL-SHORTWAVE DX SPECIAL?" NOT QUITE!...In the January issue, FROM THE STAFF refers to the ABC Talkradio DX special of last December 7th as "all-shortwave." This was based on comments made to club HQ by a few members, and is not accurate. Member Greg Hardison, who sent us a tape of Dr. Bruce Elving discussing SCA and FM DX on the show, will set the record straight for you on page 22 of this issue. For those of you who wrote to us and criticized the show and W.T.F.D.A.'s support of this fine effort (one DXer even criticized the show before it took place) let us ask this question: what WERE you listening to? Our thanks go to Greg for clearing things up. Any further comment on this may be sent to Alan Hyams for the MAILBOX column.

ADDRESS CHANGES...Going to send a DX report to the EASTERN TV-DX editor? John has moved, so send them to John F. Combs at 2969 Herschel #7, Jacksonville FL 32205. His phone number has changed too, so take note of the new one, which is on page 40. VUD column editors, don't forget: your columns now go to a new address, not to Dave Nieman. Future issues will be readied for printing by Layout Associates, and will continue to be done by the same printer in Buffalo. Expect to see a few layout changes next month.

CONVENTION 1986 ONLY FIVE MONTHS AWAY...Seems like a long time, but it really isn't. Upcoming VUDs will be informing you of plans for this year's club event, and if you'd like to volunteer to be a part of the program, (giving a lecture, or a demonstration, etc.) now's the time to drop a line to this year's host: Dr. Michael Lapinski, RD #2, 2478 Palm Road, Jamestown NY 14701.

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Logos on front cover were sent in by Richard Eddie (St. Louis, MO).



MAILBOX

Alan Hyams
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City Island Sta.
Bronx, NY 10464

March, 1986

Last month, I mentioned the topic of controversy, and how I didn't want to have to be the one to stir it up. Well, I didn't have to. Richard S. Berg-Anderson has sent in a report on a new bill that would severely hinder our hobby, especially PSB DXers:

"I have what I think is a very serious topic to discuss, particularly in light of the fact that the VUD includes a column on VHF Utility DX. That topic is the Electronic Privacy Communications Act introduced in the U.S. Senate (as S.1667) by Senator Leahy (D-Vt) and the U.S. House (as H.R. 3378) by Rep. Kastenmeier (D-WI). This bill, if passed, would extend prohibitions against "wiretapping" to cellular/mobile/ cordless telephones (and perhaps marine telephones and even Ham radio "autopatch"), making it a violation of federal law to monitor such transmissions.

I am opposed to this bill on principle. While it might sound fine to extend "land line" type privacy to wireless telephones, this opens up a can of worms because these wireless telephones are, after all, radio transmitters. Since 1919, when the U.S. Navy was blocked from controlling radio (which it had taken over during WW I), our nation has had the basic principle that while the message sent "belongs" to the sender and intended receivers (preventing us from "using" or "divulging" that message), the airwaves used belong to "we, the people" (allowing us to listen in). We are one of the few countries (if not the only country) where that is true- in many countries, the government controls the airwaves, even the FM and TV broadcasts which are the staple of our organization.

This bill begins our going down the road away from that sixty-seven year old principle. If one radio service is given a higher standard of privacy than others, how much longer can it be before the others demand that same higher standard?

...I urge all W.T.F.D.A. members to, like myself, think long and hard on this issue and act accordingly. Perhaps we should write our senators and representatives regarding this bill (I have already done so). Perhaps we should poll the membership and, if necessary, oppose this bill as a club. Perhaps even the entire ANARC community may have to get involved. I don't know the best course to take; I do know this bill, if passed, may set a very dangerous precedent."

I agree with Richard that this bill should not pass. If it should, however, it will have an effect limited to the bands already involved. Commercial broadcasters will have no interest in such a law.

Another thing: to say that the airwaves belong to the "public" sounds nice, but think of how accurate that statement is. What does "public ownership" mean anyway?

NEXT TIME: Robert Goodman's proposed call letter policy.

Till then, 73s to one and all,

AL





FM NEWS

BRUCE F. ELVING, Ph.D., Editor
241 Anderson Road
Eska MN 55733-9413, U.S.A. —address to
which advance orders for the "FM Atlas"
may be sent —look ahead 3 pages for
announcement of it

WFGG an FM pirate?

NEW FM STATIONS, TRANSLATIONS GRANTED

AL Russellville 97.7 3000 h.v.; 300°
AK Ketchikan 106.7 27000 h.v.; minus 66°; g.
AR Russellville *91.1 360 h.v.; minus 66°; g.
Educational Broadcasting Foundation
CA Burney K288UM 105.5 (KARZ 106.1
Burney FM translator)
CD Evergreen 96.5 100000 h.v., directional,
1550°—initial decision, subject to reversal
GA Columbus *89.5 50000 h.v.; 44° 0'; g.; Bible
Broadcasting
GA Fort Gordon WFGG *88.3 Stereo, power
estimated at 250 watts, 70° ("two-bay
horizontal antenna on a low chimney");
"Heard one week without legal IDs, just military
PSAs and WFG-64.0 carrier, initial IDs.
The station is the FM outlet mentioned in
POPULAR COMMUNICATIONS, May '84."
Fort Gordon is the home of the Signal
Corps
IL Kankakee WMMG 92.7 3000 h.v.; 300°
MS Vicksburg W221AI 92.1 (WMSI 102.9
Jackson)
NH Franklin *93.1 1800 h.v.; 425°
OH Mount Vernon *90.1 3000 h.v.; 185°; g.
Nazarene College (Ardmore)
OK Mc Alester K240BF 95.9 (KKAJ 95.7)
PA Lewistown 106.5 265 h.v.; 815°
WY Rock Springs 95.1 94 000 h.v.; 1165°
AT Bonneville (190 km NE Edmonton)
98.7 50000 h.v.; CBC French, CHFA relay
AT High Prairie (290 km NW Edmonton)
90.9 50000 h.v.; CBC-CBX relay
AT Whitecourt 90.5 5000 h.v.; CBC-CBX
NF Bonne Bay (adjacent to Norris Point)
89.1 1000 —CBY, CBC (CBC, CBI relay)
NS Margaree, Northeast (10 km NE), 42 W
ON Hearst 90.3 10500 h.v.; CBON-CBC French
ON Wawa 90.7 890 W, CBON relay
NW Yellowknife (200 km NE Hay River)
10.9 130 watts; g.; Native
YT Haines Junction 90.5 1 W, ethnic
YT Idlu Crow 90.5 1 W, ethnic

FACILITIES Changes Granted

AL Mobile WLPR 96.1 1 000 000 h.v.; 1000°
CA Lone Pine K257BZ 99.3 (KBEE 103.3
Modesto translator); changing from Big Five
K257BZ 99.3 and a KHOP 104.1 Modesto
translator
CA Newhall K261AB 100.1, not "Newell,"
which was a misspelling; same coordinates as
for K100.1 100.3, which has deleted (see
"Deletions")
CA San Rafael KSRH *88.1 7 watts h.v.; 66°
CO Trinidad KCRF-FM 92.5 (from 92.7)
91000 h.v.; 1035° [directional]
CT Monroe WMMR *88.1 4 100 h.v.; 400°
FL Havana WHFL 104.9 20000 h.v. H607134°
FL Homestead Springs WKCV 95.3 2800 h.v.
FL Miami WJAX 96.5 (from Miramar)
FL Miami Beach WINZ-FM 94.9 96 000 h.v.,
directional (1005°)
GA Rome WKXC 97.7 470 h.v.; 780°
IL Elmhurst WTPC *95.5 (never having moved
to 95.9) 10 h.v.; 210°; see also Feb. VUD, pp.
37-38, Buena Vista
KY Elizabethtown WQXE 100.1 2150 h.v.; 380°
MI Leitchfield WKHG 104.9 270° 0000 h.v.
MI Grosse Pointe WQXC 100.9330° 0000 h.v.
MI Zeeland *ZND 99.3 24 000 h.v.; 550°
MN Gilbert K280C 90.9 (from K240AC
95.9); on air on 108.9!

MN Red Lake W228AM *93.5 has KBHV 95.9
International Falls on it, not KFNW-FM 97.9
Fargo ND
MN Rochester KLSE *91.7 (from Rushford,
but still announcing as Rushford), 94 000 h.v.;
930°
MN Winona KAGE-FM 95.3 1350 h.v.; 495°
MS Magee WJJC-FM 107.5 985° (100000 h.v.)
MS McComb WCCA 94.1 980° (100000 h.v.)
MS Pascagoula WPMO 99.1 100000 h.v.; 980°—
above two stations electing to be Class C1,
falling just short of 985° for Class C1, I wonder
why stations choose to be at maximum power
for a lower class, rather than going up five
more feet and qualifying for full Class C
status? [no 1 network]
MO Rolla KZNN 105.3 100000 h.v.; 630°;
MO Springfield KSMU *91.1 405° 40000 h.v.)
NH Wolfeboro WLKZ 104.9 330° 0000 h.v.)
NJ Atlantic City WAYV 95.1 255° (20000 h.v.)
NY Albany WROW-FM 95.5 12000 h.v. (1020°)
NY Hyde Park W220AE *91.9 (from W272AF
102.3 Rhineback NY)
NC Charlotte WBCY 107.9 96 000 h.v.; 1690°
OH Cleveland WQAL 104.1 110000 h.v. (106°)
OH Wooster W224AM 92.7 with WCLV 95.5
Cleveland (from W213AC *90.5 with WCUJ-
FM 89.7 Columbus OH on it)
OK Oklahoma City KDCC *88.9 (CP for 88.5
rescinded by letter 5-85)
OR Bend KJII 105.7 35000 h.v.; 590°
PA Blairsville WNOQ 106.3 24 000 h.v. (660°)
PA Butler WLER 97.7 23 000 h.v. (370°)
PA Meadville WZPR 100.3 20000 h.v. (590°)
SC Aiken WJFX-FM 95.9 315° 0000 h.v.)
SC Gainey WYFG *91.1 100000 h.v. 62000 v.
(580°); nondirectional antenna assumed
SD Sioux Falls KCFB 100.1 from *90.1
(assumed to be going commercial) [directional]
TX Denton KNTU *88.1 100000 h.v., 44° 0';
TX Dibiell KIPR 95.5 570° (100000 h.v.)
TX Keene KJCR *88.3 15500 h.v.; 250°;
directional; does not share time, apparently
TX Mesquite KOEM *88.3 3000 h.v.; direction-
al; 300°; doesn't share time, apparently
VA Richmond WRXL 102.1 20000 h.v.; 785°—
reduces coverage from former 140 kw at 320°
WV Mullens WPMW 92.7 1650 h.v.; 445° (100.1)
WI Tomahawk W252AM 98.3 (from W261AA /
ON Hamilton CFMU 83.3 new, unannounced
height (50 watts h.v.)
ON Sarnia CBEG 90.3 (from 106.3) "must be
using 1 to 3 kw ERP as their signal is very
weak here," CBE announcements give CBE's
new frequency as 90.3.
PQ New Carlisle CBVN 101.5 800 h.v. (275°)
PQ New Richmond CBVR 103.5 1000 h.v.
(500°) PQ Wawa WQXC CBVV 106.1 23 watts
PQ Wawa WQXC CBVF 101.5 23 watts

CALL Letters Assigned or Changed
AL Scottsboro 98.3 WKEA-FM (WKEA-FM);
non ID assumed retained
AL Talladega 92.7 WQXR (WEYY-FM)
AR Little Rock 98.5 KLAZ-FM (KLAZ-FM);
affects one translator
CA Barstow 94.3 KDCU (KZNS)
CA Carlsbad 95.9 KKOS-FM (KKOS); non ID
assumed dropped
CA Carmel Bay 103.7 KHTZ (KHTX);
affects two translators [one translator
CA Fallbrook 107.1 KMLD (KAYO); affects /
CA Los Angeles 101.1 KRTH-FM (KRTH); non
ID retained + 1XSQ 110°; g. (urban-contemp)
106.9 KPWR (KMGG); "Power!"

CA Marysville 99.9 KRFD-FM (KRFD)
CA Monte Rio 97.7 KMGG (KRJB); rp, 10s
now with Santa Rosa
CA Oceanide 102.1 KGMG (KEZL)
CA San Francisco 96.5 KOIT-FM (KOIT); non
ID assumed dropped
FL Clearwater 97.9 WKRL, rp, "Classic Rock"
FL Mary Esther 106.5 WYVZ
GA Waycross 97.7 WWUF (WAST)
HI Kailua-Kona 93.5 KJHM
IL Bonners Ferry 92.1 KRBF [Z-95°]
IL Chicago 94.7 WY1Z (WLS-FM); still r./
IA Decorah 100.9 KRDI-FM (KDEC-FM)
OK Oklaoma *88.5 WJIE (FM)
LA New Orleans 93.3 WQUE-FM (WQUE/
LA Shreveport 93.7 KITT
ME Norway 92.7 WOXO-FM (WOXO-FM)
MD Princess Anne *91.3 WSM
MI Charlevoix 106.9 WKHQ-FM (WKHQ-FM)
FM; non ID assumed dropped
MI Gladstone 105.5 WFMJ
MN Crookston 95.1 KQHT (KHEZ); r., "Magic-
35" (fract); 415° (100000 h.v.)
MN Hutchinson 107.1 KJCR (KDUZ-FM); m,
non ID, still mutual (1515)
MN St. Louis Park 104.1 KJJO-FM (KJJO);
still, "K-Joe"; affects 1 translator (1515)
not on air)
NE Kimball 100.1 K1DE [805°]
NV Sparks 92.1 no calls (not KROI); 290 h.v.;
100.9 KROI (KNAA) (Sandy Creek)
NY Pulaski 101.7 WSCP-FM; AM is in nearby /
NY Watertown *90.3 WJNY (WJNY)
NC Dunn 108.1 WDKS (WDKC); still, still
"D-105"
OK Alva 94.3 KMAO
OK Haneyetta 99.5 KISI (KDLB-FM) [2 xtrs.
OK Owasso 106.1 KVLTV (KCMAL); rm; affects /
OR Toledo 107.1 KTDQ-FM (KCTA)
PA Jersey Shore 97.7 WEUZ (WSDV); now
B[eautiful music]; "Easy-97.7"; no network;



IDs only with Williamsport, dropping Lock
Haven
SC Clearwater 98.3 WCNA
SC Goose Creek 94.3 WNLB-FM (WNLB); now
[soul]; adds Charleston to its ID
TN Elizabethtown (from Jonesboro) 99.3
WUSJ (WJSD-FM)
TN Monterey 107.1 WRJT (WMCZ)
TX Canyon 107.9 KAKS-FM (KHQB)
TX Plainview 103.9 KPMB
TX San Angelo 98.7 KGLB (with Salt Lake City
UT Spanish Fork 106.5 KBER (KBHV); IDs /
VA Woodbridge 106.9 WCRX-FM (WPKX-FM);
rp, "Classic Rock"
WA Long Beach 94.3 (not 100.1) KCGW
WI Manitowoc 92.1 WLTV (WKKB) "Classic"
WI Milwaukee 96.5 WKHL (WMBF); r./
VI Charlotte Amalie 107.1 VWGN
BC Vanderhoof 95.9 CIBC

FORMATS/NETWORKS

AR Mountain Home KKTZ 107.5 r
CA Long Beach KNAC 106.5 r (heavy metal;
no longer progressive)
IL East St. Louis WMYR 101.1 p (from jr)
IN Columbia City WZRO 106.3 back on air for

FCC/FM

one week with r, \$, no SCA, but reported back
off the air.
IN Lafayette WKUS 93.5 S network, now on
93.5, having moved from 92.7, "93.5 WKUS"
(not a Nul Der)
IN Versailles (pronounced Ver-Sair, not like
the French, "Ver-sight") WOV R 103.1 k, \$,
sign off 2200. This reporter is aware
another reporter said they were r, but he
definitely heard all k songs, such as by
Ronnie Milsap.
KY Bumside WJDU 93.9 r, "DJ-94"
ME Brewer WQCB 106.5 to be k
MD Frostburg WFRB-FM 105.3 k (only 1 hour of
gospel) per day now
MA Barnstable WORC 99.9 bc
MA Nantucket WXJY 96.3 r
MA West Yarmouth WJFK 94.9 r
MA Worcester WSRB 96.1 [middle of the road]
MI Alma VFCV-FM 104.9 r, still monophonic
MI Birmingham WMJZ 94.7 mr
MI Caro WIDL 104.9 r, \$
MN Princeton WQRF-FM 106.3 drops S net, now
CNN news, still k, \$
NY Bristol Center WYLF 95.1 no network (was U)
NY Buffalo WGR-FM 96.9 m, "Light FM," eliminat-
ing all rock to appeal to 25-54 demographic
NC Asheville WKRR 92.3 rp, IDs with Greensboro
OR Tillamook KTLJ-FM 104.1 k
PA Altoona WFFB-FM 98.1 does too have C net!
WPRR 100.1 O net (drops network)
PA Boyertown WBYO 107.5 G network
PA Charleroi WESA-F 98.3 r, not mr
PA Ellwood City WFEM 92.1 r (from k), "Classic
Gold 92," IDs now with New Castle, no Mutual
heard, assume no network
PA Pittsburgh WPTS *98.5 j; WQUD *90.5 j
PA Waynesburg WANG-FM 103.1 k
WV Bethlehem WHLX 105.5 m, Satellite Music
Network's "Stardust" feed
SC Ravenel WFXR 101.7 rp, adds Charleston ID
TN Pulaski WINJ 98.3 rp, mainly "lite rock."
Strict non ID of "J-98"
WV Miami WVCN 107.3 k, Stereo
WV South Charleston WJYP 100.9 g
WI Chippewa Falls WCFW 105.5 no S net (has
CNN now); still monophonic with lotsa polkas
WI Superior (studio and transmitter in Duluth MN
but I maintain DX is should count this as a WI
station!) KZIO 102.5 Y net (T); delays
news to :20 most hours
WY Laramie KRQU 102.9 A net (x-D network)
WY Cheyenne KFQB 97.9 no Y network
WY Gillette KOLL 96.9 D network (from Y)
WY Riverton KTAJ 93.9 E network
WY Rock Springs KSIT 104.5 A net (from Y)
WY Worldview KENB 96.1 E network
MB Winnipeg CHIQ 94.3 mr [and talk]
NB Moncton CKUM 105.7 mt (middle of the road)

How to pronounce Versailles!

by states, with frequencies given only for stations
having an ABC affiliate; no cities (you'll have to
hunt!); and no cities or frequencies for stations
allegedly having no affiliation when formerly listed
as having such. Use a magnifying glass to read.
Call letters are given as he listed them, without the
"FM" suffix.
AL: WCRD 92.7 D; WZD 104.1 Y; WAP 94.5 Y;
WKLN 92.1 Y; WOOF 99.7 D; WZEW 92.1 K;
WTWV 95.9 A; WHKW 98.1 no Y; WLHO 96.9 no
Y; WDRM 102.1 no A; WHOD 104.9 I; WWRB
102.5 I; WKSJ 94.9 E; WMPG 99.1 E; WELW 102.3
I; WKEA 98.3 I; WTUN 100.1 D; WEYV 92.7 E;
WFEK 95.7 E; WEIZ 100.1 E; WKYD 98.1 I.
AK: KJBA 100.1 I; KSUP 106.3 K
AZ: KAPT 92.9 I; KZZZ 94.7 A; KKR 92.3 Y;
KNOT 98.3 Y
AR: KLBQ 99.3 Y; KTCN 100.9 D; KFFB 106.3
I; KCAP 92.7 E; KSSN 95.7 E; KHLT 94.1 D;
KTWN 107.1 E
CA: KXGO 93.1 Y; KEKA 101.5 I; KFRY 101.9 D;
KNCO 94.3 I; KNGT 94.3 D; KHOP 101.1 A
KMYX 105.5 Y; KPQP
93.5 Y; KOLA 99.9 K;
KITS 105.3 A; KOME 98.5
K; KJAX 99.3 E; KBOS
94.9 A; KOYN 95.5 Y;
KIAH 103.3 D; KBOB 98.3
98.3 D (KBOB still on
until after it goes up in
power and height; then
Stereo is a possibility, I'm
told). [107.3 Y]
DC: Washington WRXQ/10
CO: KKOD 107.1 I; KRIZ
98.7 E; KOZR 102.5 Y;
KYGO no D; KMTS 92.7 I;
KYOU 92.5 E; KGUC 98.3
I; KCCY 96.9 F; KAVI
95.9 D; KYMT 104.7 Y
CT: WCCC 106.9 Y
DE: WJBR 99.5 I
FL: WYGC 100.9 E; WCRJ 107.3 D
WDBZ 100.3 K; WGNB 98.5 I; WBGW
98.9 Y; WNTN 94.9 E; WMMX 95.9 D; WAWV
105.5 D
GA: WKAC 101.7 E; WFXA 103.1 A; WZNY 105.7
D; WBYZ 94.5 E; WGIG 100.7 I; WQMT 99.3 E;
WAYS 99.1 A; WMCQ 104.9 E; WDXA 95.3 I;
WDRZ 102.3 I; WPGA 100.9 Y; WQWE 105.5 K;
WEAS 93.1 A
HI: KHLH 101.1 D
ID: KPRY 94.9 Y
IL: WRMS 94.3 D; WJAZ 92.1 D; WIXN 101.7 E;
WGBQ 92.7 K; WQEZ 103.1 E; WYER 94.9 K;
WTAO 104.9 K; WKXK 100.9 D; WPKX 104.9 D;
WQUC 95.3 K; WCCI 100.1 D; WDEM 101.9 E;
WKRY 107.1 D; no network; WBS no I; WCIL
no D; WTKR no K; WCCO no K; WSDY no I;
WBSW no A; WIRE no Y; WACE no E; WJEZ no
E; WZOK no A; WSAK no I; WKIO no K; WGEA
no E.
IN: WLHN 97.9 D; WLFO 103.9 A; WATI 107.1 D;
WBTU 93.5 E; WAZY no Y; WJNZ no A; WCC no
I; WLZR no E; WPGW no Y; WJOL 97.7 D; WOLK
no A; WR1A 101.3 Y; WVTs no I; WZZQ 107.5 D;
WKID no E.
IA: KMGO 98.7 D; KRIT 96.9 D; KNJY 97.7 Y;
KTR no D; KDSN 107.1 D; KMGR 93.3 D; KEMB
98.3 D; KBCD no I; KHRB no I; KWGG 104.9 D;
KIDA 92.7 D; KKRQ 100.7 Y; KJAL 97.7 D;
KMAQ 95.3 D; KILJ 105.5 D; KXJX 103.3 K;
KQWC no E.
KS: KBUZ no A; KQSM 105.5 D; KCLY 100.9 D;
KEGS 101.7 E; KKQJ 97.3 I; KNZA 105.9 D;
KSJU 102.1 Y; KSLS 101.5 E; KSCB 107.5 I;
KSKC 99.9 A; KFDI 101.3 E [listed!]
Rogers reminds that commercial stations only are /
KY: WAMX 93.7 A; WDNS no A; WABD no A;
WHKC 103.1 Y; WKMO 106.3 Y; WHOP 98.7 E;
WAKA no I; WJVL no A; WKHG 104.9 I; WLRB
102.3 K; WKYV 101.7 Y; WKOR 92.1 I; WAAW
no D; WKYQ 93.3 I; WQHY 95.5 A; WBYR 101.1
D; WSKV no A; WTKY no I; WPMI no E.
LA: KQID no A; WGGZ no Y; WYNN 101.5 E;
KSMI no A; KJJB no D; KFMV no I; KYKZ no
I; KDBH 97.7 I; KQGM no I; KMBQ 93.7 A; KY-
KI no E; KTOQ no E.
ME: WGUJ 100.9 K; WCLZ no I; WLKN no I;
WJBO no Y; WPOP 101.9 E; WWMR no I;
MD: WOSR 105.7 A; WBJC no A; WWIN no I;
WQOC 103.9 E; WCEM 106.3 I; WCLY no Y;
WXCIE 92.1 A
MA: WBOS 92.9 D; WCAV no Y; WCOD no I;
WJFX no E; WTMP no I; WBEC 103.5 A; WCRB
no I; WJFK no E.
MI: WQOB no K; WPAQ no I; WIFB no A;
WAAQ 102.3 Y; WEVZ no I; WKHQ 105.9 Y;
WMMO no E; WQLZ no I; WCFX no D; WHYT
96.3 Y; WCLX 92.3 E; WVIC no Y; WGLQ 97.1
Y; WCRZ 107.9 A; WGRD 97.9 Y; WCIJ 101.3
E; WJGS 98.5 Y; WUPM 106.9 E; WMOI no K;
WIBM no A; WKLA no I; WRRK 97.7 E; WBNY
93.5 E; WQXC no I; WFXZ 100.9 A; WIOG
106.3 E; WQWV 92.1 E; WRR 95.3 A;
MN: KYCK 97.1 D; KDKQ 107.1 I; KJOL
101.1 E; KQRS 92.5 K; WJJO 98.5 D; KKKV
105.9 E; KOWO 92.1 I; KDOM 94.3 D; KCKK
no Y; KLOH no Y; KWNG no A.
MS: WGM 102.3 D; WBSI 102.3 E; WQXB
100.1 Y; WTYX 94.7 Y; WMSI 102.9 E; WLSM
107.1 D; WQNZ 95.1 E; WMS 97.5 D; WKY
104.9 K; WPMO 99.1 I; WQMY 98.7 K; WUUN
no Y; WRHM no Y; WKYV no I; WABO no I
MO: KMZU 101.1 D; KLDN 92.7 I; KCAK 97.7
D; KCPC 97.3 K; KIRK 103.7 E; KNIM 99.3
D; KPWB 104.9 D; KCBW 92.1 K; KADI 96.3
A; WL 92.3 E; KLTW 97.1 D; KWTO 98.7 Y;
KLPW 101.7 D; KLRK 100.1 D; KGMOI no Y;
KRXL no I; KRIS no Y; KZNN no I.
MT: KPQX 92.5 E; KZIN 96.3 D; KMON no E;
KLYO no E; KJZZ 94.7 I; KTCN 104.9 D; KTAJ no E;
KFRX no A; KKNP no I; KSID no I
NV: KLKT 100.1 E; KOMP no A
NH: WHDQ 106.1 Y; WFRD no I
NJ: No name: WAYV (no A); WNNN (no I);
WTKL (no E); WFRB (no A); WFTS (no I);
WKKW (no A)
NM: KFMG 107.9 K; KLVF 100.9 Y; KMMQ
105.9 Y; KATK no Y; KDEM no E; KEVR no
Y; KOVO no I; KLLT no E; KZOR no I; KBIM
no A; WYIP no I
NY: WROW 95.5 I; WCGA 107.7 E; WMOV 97-
7 Y; WBN 102.5 Y; WPHD 103.3 A; WOJ
100.9 E; WYLR 95.9 K; WAPP 103.5 A; WZOZ
101.3 A; WCFB 99.9 Y; WMJQ 92.5 Y; WZEO
101.3 E; WOUR 96.9 K; WRCK 107.3 Y; WAAI
no A; WNSY no Y; WSCG no D; WOKW no Y;
WBLK no A; WWHB no I; WRVW no I; WHUG
no A; WYIP no I
NC: WCLN 101.1 E; WDGC 105.1 A; WQMG 97-
1 Y; WMSQ 104.9 E; WKIT 102.5 E; WMAG 9-
9.5 E; WODW 97.7 Y; WQDR 97.7 E; WFJA
105.5 Y; WKSF no E; WSOB no I; WBCY no I;
WFXC no D; WBBQ no Y; WYFL no E; WCRK
no Y; WKML no I
ND: KYYY 92.9 H; KQDY 94.5 E; KZZY 103.5
I; KIZZ 93.7 Y; KJSM no E
OH: WNU 107.1 D; WKRR 101.9 A; WRCC
92.3 K; WGAR 99.5 E; WRXY 107.1 D; WHMQ
100.5 D; WNR 100.1 E; WMT 102.1 E; WVNO
106.1 Y; WKSU 101.7 E; WTOO no Y; WNNR
no Y; WQON no I; WBNQ no I; WCSM no I;
WBNS no I; WGTZ no D; WBEA no E; WLLT
no A; WBLZ no Y; WZLE no E; WNDH no E;
WPNM no Y; WZQO no Y
OK: KZZE 97.7 Y; KWQX 101.1 E; KBXR 97.3
Y; KHCC 103.1 I; KCCI 1; KKBBS 92.7 I; KCMO
101.3 Y; KAYI 106.9 A; KOFM 104.1 Y; KEBB
94.7 D; KVRQ 105.5 Y; KCFB 98.5 D; KTLN
no E; KQZZ no D; KRHD no I; KLCB no I;
KNID no I; KYBE no Y; KISI no I; KLAW no I;
KNFB no I; KJYO no A; KXOI no I; KSDW
no A
OR: KOOS 100.9 I; KMTT 93.7 K; KXQB 96.1
K; KUMA 107.7 I; KMKJ 106.7 Y; KKRZ 100-
3 A; KACI 97.1 I; KBOY no E; KNPT no I
PA: WAEB 104.1 I; WTKS 106.7 A; WBXX
94.3 A; WKBT 106.7 E; WTPA 93.5 K; WRFX
99.3 D; WVSC 97.7 I; WKRR 98.5 Y; WZZO no
A; WLSF no E; WQYX no Y; WDNH no E; WBF
no E; WUFM no I; WMJW no A; WDSY no I;
WGBB no A
RI: WPRO 92.3 Y; WHY 94.1 K
SC: WCKN 101.1 Y; WNOK 104.7 K; WTCB
106.7 E; WDDM 101.3 A; WJFX no D; WZLD
no A; WPDZ no A; WMMX no Y; WLNB no I;
WFB no A; WYJR no A
SD: KSDN 94.1 A; KOHB 96.7 I; KMIT 105.9 I;
KGFX 92.7 Y; KPLO 94.5 D; KGGG 100.3 K;
KPAT 97.3 Y; KELO 92.5 D; KDLO 96.9 D
TN: WTBG 94.3 E; WQSO 94.1 I; WKKX 1
104.5 A; WQOK 92.1 Y; WKKG 95.9 D; KRN
101.1 A; WZZR 102.7 K; WLLX 92.1 I; WKDF
103.3 K; WOKI 103.3 A; WALR 104.9 D
TX: WQXK no I; WYTM no I; WZLT no I; WZLT
no I; WIST no Y; WKTA no A; WHRK no A; WSIX
no I; WYCO no A
TX: KMLL 98.7 I; KIBL 104.9 E; KTON 106.3
A; KHLB 107.1 I; KCRM 103.1 E; KQSO 101.7
Y; KVMX 96.7 E; KBFM 104.1 A; KSET 94.7 Y;
KLKZ 98.3 D; KEGL 97.1 Y; KGD 101.7 E;

I am giving the information exactly as he did,

FCC/FM

KQUE 102.9 E, KRVL 94.3 Y; KODK 92.7 E; KRLE 99.5 I; KGAR 106.3 E; KNFM 92.3 E; KPTX 98.3 D; KSTV 105.7 D; KTYL 93.1 Y; KHOO 99.9 Y; KNIN 92.9 Y; KEMN no A, KBUV no A, KWHI no E, KISI no A, KORA no A, KSTE no A, KZFM no Y, KLVU no A, KFIM no A, KJCS no E, KODM no Y, KTXE no A, KXZL no E, KBUC no I, KEYI no A [KZEZ no I]

UT: KSOS 106.9 K, KARB 98.3 A, KWKC no I, VT: WBFL 107.1 D, WCFR no Y, VA: WVVV 104.9 K, WBBC 93.5 Y, WQW 98.3 I; WFOQ 99.3 Y; WFTF 95.3 I; WLSA 105.5 E; WJIS 101.4 A, WCMG 100.5 E, WNOB 98.7 K, WRXL 102.1 K, WSLQ 99.1 A, WTTX no Y, WKHK no E, WPLZ no K, WPSK no I, WMJR no D, WCXR no Y.

WA: KXLE 95.3 E, KOMW 92.7 I, KZZK 102.7 Y, KAFR 97.1 D, KXDD 104.1 Y; KONA no A, KLYK no A, KLYN no E, KEZZ no E, WV: WWTZ 93.5 E, WHAJ 104.5 Y, WBTO 93.5 E, WQBE 97.5 I, WKWK 106.5 I, WTCR 103.3 I, WKEE 100.5 Y, WQZK 94.1 E, WTRN 105.9 E, WKGI 103.9 E, WAEX 95.9 E, WKLC 105.1 K, WVAE no D.

WI: WLTV 94.9 I, WRDN 95.9 E, WDUZ 98.5 E, WKAU 104.9 K, WSPF 95.9 E, WQQM 106.3 E, WKTI 94.5 Y, WLTQ 97.3 A, WQFM 93.3 K, WWMH 95.9 E, WDUX 92.7 E, WDEZ 101.9 D, WAPL no E, WDXC no A, WLJY no I (only carries Paul Harvey); WDDC no E, WRCO no Y.

All of the above changes entered into my frequency records, where network listings may continue. I have already spent about 40 hours on this list, so can you blame me for not spending the 160 hours or more it would take to pull the cards, key-punch them and reinsert them all? I thank Roger for all the time he has spent on the project. And ABC is only one (or six, depending on how you count) of multitudes of networks to keep track of. Recently I heard American Public Radio network on WVEE '88.1, Elkhart IN (coming in by means or aurore), which is the first station I know of to have that network and not NPR, but APR is one of several networks that I have not been listing.

Stereo (\$) Stations

AL Opp WJLF '91.9, "Station is in a church. Pastor says they are having trouble, 'as they didn't send the directions with the equipment'."

GA Thomsville WHMJ 107.1 Stereo "as was WTUF. They say they are 5,000 watts... on Sunday a m. 1-19-86 announcer or the gospel programming constantly referred to "Listening to the Gospel on WTUF". WHMJ sometimes refers to themselves as "the Power Station", as WGLF 104.1 Tallahassee did about a year ago."

IN Crawfordville WNDY 106.3 "Was c on Sunday morning and afternoon... haven't heard WNDY in years!"

IN Decatur WQTZ 92.7 r, "The New 92.7 Fm" (strict, but calls sometimes sung between songs)

IN Elwood WEWZ 101.7 back in stereo with strict nonID: "EZ-101 Stereo"

IN Indianapolis WJEL "89.3 r, said "stereo-89," but gave calls frequently so not a nonIDer

IN Muncie

WOKZ 104.9, rock

IN Portland WPGW-FM 100.9 K, "Jay Country-101" (strict); named for Jay Country IN.

NY Henrietta WRHR "90.5 "it don't sound very good, but the 19kHz pilot lights, so it must be"

NY Wellsville WJQZ 93.5 r, no network (mostly "tight rock," as survey reported in Olean paper that 80% of the public favored this type of music [?].

NC Asheville WQOS "88.1 c, interested in starting a talking book for the blind SCA service

WYOB to rise from the dead, but will WITT?

OH West Carrollton WQRP "88.1 - ID with Kettering, gk, "not just g... The signal seems stronger here. Have they increased power?" [Yes - to 5000 watts h, 20 meters.] SC Conway WHMC-FM "90.1 j, p assumed TN Lewisburg WJLM-FM 94.3, k

NOT IN STEREO ANY MORE--delete Stereo Listing: CA San Clemente KWVE 107.9, all gospel

ON AIR AND DX READY (Selected) MN Ada KMCA 106.3 3000 h.v; 275'

MO Joplin K202AN "88.3 NE Alliance KAAQ 105.9 100000 h.v; 705'

WI Whiting WYTE 96.7 3000 h.v; 300'; \$; k ("easy country") ID with Plover. "White-96," but not strict; calls often used; TX (telemetry)

SCA. I can't write to them as Whiting has no ZIP Code, and post office in nearby Plover will not deliver, even though I have the correct street address and ZIP+4 for them! (3012 Post Road, Whiting WI, Plover ZIP+4 is 54467-9703.)

FM mistakes, 9th ed. FM ATLAS and this column

CA Chico KPAY 95.1 omitted from map, p. 70 ND Williston KPRR 2-86 VUD shows as 89'; 12-85 as 89.3; now "89.5.

SEE ALSO VUD, Feb. '86 for: GA Valdosta WAAC nonID and questionable format change from country, p. 35, Nodquist MO Overland KRSH "80.1 format, p. 38.

MO St. Louis and IL Godfrey WLCA "89.9 sharing frequency, although FCC does not list them as sharetimers, so they could operate simultaneously if they wanted to, p. 38, Buenneman.

PQ Quebec CHIK 98.9 for nonID, p. 35, Strobel--anybody know this station's music format and if it has stereo?

LAST-MINUTE CHANGES OK Langton KALU "90.7 is \$--has been listed that way; they finally made Stereo.

GA Forsyth WFM 100.1 s (at night); I'm assuming g has been dropped as a main part of the station's programming. Still mono.

GA Manchester WVFJ-FM 93.3 has USA network, not Mutual. "Note this is a NEW network, and is NOT the same thing as United Stations" ["but not every hour"

TN Chattanooga WDEF-FM 92.3 I network / SLOGANS/NON-IDS

CO Denver KOAQ 103.5 "Soft Rock" (no Q-103)

FL Marianna WJNF "91.1 FM-91, mono g, "USA Radio Network"

GA Atlanta WSB-FM 98.5 no nonID WARM-FM 99.7 " " " "

GA Augusta WBGO-FM 104.3 no nonID. "The Q ... not heard in a 3-hour

listening period" GA La Grange WEKS-FM 104.1 Kiss-104, s, 1290' (100000 h.v), with

transmitter Newnan GA; 49 miles' primary, 98 miles' secondary coverage GA Macon WMTM-FM 93.9

FM-94. GA Thomsville WHMJ 107.1, now \$, "Magic 107," "All Hits," Satellite News network, now rock! "Sounds like any big city rocker, with a booming voice DJ with a phony name.

Just the opposite of black-oriented WTUF, with their soul and gospel and hometown black announcers... Just another WGLF, WHTZ, WJAD, WZNE, WACL, WRUF, etc."

IL Hoopston WHPO 100.9 Stereo-101 (strict)

IL Paxton WPXN 104.9 FM-105 (not strict) (M IN Franklin WGAQ 95.9 (dies) Stereo-94, no / IN Hartford City WWOV 93.5 WO, now having changed from 104.9 to make way for WOKZ IN Lafayette WKUX 92.7 no nonID; says "93-WKUX." [But since this report has come in it has moved to 93.5.] [from 93.5

IN Kokomo WZWZ now 92.7, having moved / IN Franklin (see above) instead of having M network on WGAQ now has Satellite News Net.

Now back to more Slogans; nonIDs: KS Great Bend KZXL 97.9 XL-108, now on air, Stereo, r(ock), IDs with Hays-Salina

MO St. Louis KKHR 103.3 Hit Radio 103 OH Akron WONE-FM 97.5 W-1, adds Cleveland

-Canton to its ID [rp. OH Canton WRQK 106.9 still Good Rock 107, / OH New Philadelphia WNPQ 95.9 Quick-96, rp OH Wapakoneta WZQ 92.1 Z-92 (strict);

now c, \$, ID with St. Marys-Lima PA Central City WWZE 101.7 EZ 101 FM, no stereo; delete listing

PA Ebensburg WIYO 99.1 no nonID PA Wilkes-Barre WCLH "90.7 New Music-91

PA Williamsport WILQ 105.1 no nonID TN Chattanooga WOOD-FM 96.5 96-FM

WV Buckhannon WBTO 93.5 r, Stereo, Q-94, SCA is TX, ID with Weston

DELETIONS CA Crescent City K257BW "99.3 CA Merced KBDK "89.1

ID Idaho Falls KIBO "91.9 ID Kellogg KCJF 104.3 KS Hillsboro KHHS "88.1

CA Newhall KIQI-Q 100.3 "We never put it on, and applied for the 100.1 translator instead."

[See facilities' changes] "The FCC has never removed the booster from the records."

MT Gallatin-Big Sky K252AC 98.3 MT Livingston K257AM 99.3 Above two translators assumed deleted, because FCC says:

"Application dismissed to FM translators at request of applicant; form 314." Not sure what Form 314 is for, but assume it is dropping of their request to renew licenses.

TX Richardson KSLL "88.1 WA Walla Walla K206AB "89.1 (forced off by KFAE "89.1 Richland coming on; KFAE serves Walla Walla a very well, even with SCA)

WI Marathon W221AB 92.1 "because of equipment problems... will concentrate on upgrading the signal to the Wausau area" (W261AG 100.1).

BC One Hundred Mile House 95.9 BC Quesnel 103.3 BC Williams Lake 98.5

NOT DELETED--resurrect it in your records! IL South Jacksonville WYOB 105.5, granted application to change ownership

OFF THE AIR FL Blountstown WRTM 102.3 "This is for some time now"

GA La Grange WEKS-FM 104.1 Kiss-104, s, 1290' (100000 h.v), with

transmitter Newnan GA; 49 miles' primary, 98 miles' secondary coverage GA Macon WMTM-FM 93.9

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Just the opposite of black-oriented WTUF, with their soul and gospel and hometown black announcers... Just another WGLF, WHTZ, WJAD, WZNE, WACL, WRUF, etc."

IL Hoopston WHPO 100.9 Stereo-101 (strict)

MARCH, 1986

FCC/FM

NY Wethersfield WUWU 107.7 uses West Seneca instead of East Aurora in / OK Owasso KVL 106.1 adds Tulsa, K-Light [its ID. OK Poteau KINB 107.3 adds Fort Smith AR; converts to Stereophony PA Lancaster WLAN-FM 96.9 adds York-Harrisburg-Lebanon PA Mechanicsburg WTPA 93.5 adds Harrisburg

SCA News, from Radio Subcarrier Report, with which I have just started a subscription, trading it for data

CA Alameda KJAZ 92.7 92 kHz data CA San Francisco KYUU 99.7 92 kHz music (presumed rock)

MD Baltimore WRBS 95.1 92 kHz data WIYY 97.9 no SCA (had data)

WLIF 101.9 67 kHz data (plus 57 kHz ARI) MD Glen Burnie WWIN-FM 95.9 67 kHz ethnic, Greek

SCA 167 kHz (and other frequencies) CA Anaheim KEZY 95.9 157 kHz. Has American Diversified paging (TX); tones always on; no voice; a national paging service, with

pages tuning the band for relevant information, thus appealing to travelers [main carrier CA Arcadia KMAX 107.1 no SCA (drops ethnic); still monaural on/ CA Long Beach KLON "88.1 talk (instructional); occasional audio; carrier always on

KNOB 97.9 no 67 kHz; 57 kHz data CA Los Angeles KXLU "88.9 192 kHz talk and music to feed campus AM carrier current transmitters

KKHR 93.1 no 67 kHz SCA; has 57 kHz data KLOS 95.5 TX Indeas data (high-speed)

KIQQ 100.3 removes Dr. Gene Scott (tG) from 92 kHz after six-week experiment; replacement for Dr. Scott imminent on a "major LA station". Scott uses only 92 kHz SCA.

KPWR "Power 106" 105.9 no SCA now, but interested if a planned move to Mount Wilson materializes

KLVE 107.5 TX, 67 kHz high speed data [Several Los Angeles-area stations--notably KPCC Pasadena, KPWR Los Angeles and KUTE Glendale--would, reportedly, like to add

SCA when tower heights improve. Two others told our reporter that they would like to remove their SCAs at the first opportunity, citing multipath problems because of bad terrain in the area. Those

stations are KFAC-FM and KOST. KBZT 97.1 said to be not interested in getting SCA at all; others without it are neutral. Bonneville's KBIG 104.3 would like to expand to cover the entire

baseband (57-92 kHz) with SCA data; no longer broadcasting Mormon voice on Wednesday nights and Sundays as they had a few months ago.]

CA Pasadena KPCC "89.3 talking book and main channel relay much of the time; may move TTB to 92 kHz when power/height increase comes about, with 67 kHz sold to a paying customer. This

prospect bothers some of the radio-TV faculty, who feel KPCC would then move in the direction of a professional staff. CA Riverside KDOU 97.5 TG (92 kHz; Dr. Scott) 67 kHz only for

data from transmitter (occasional TX) CA San Fernando KGIL-FM 94.3 TG (92 kHz, Dr. Scott) CA San Francisco KFOG 104.5 TG (92 kHz, Dr. Scott). "We put

DR. Scott on KFOG on Monday night (Feb. 3). I flew up there with Joe Shackelford, Doc's chief engineer. I appreciate your Atlas

and product availability very much. Have mailed out a dozen or so copies of your little catalog to Doc's listeners who called us during

the six weeks we demonstrated SCA for him. . . . CA San Jose KBAY 100.3 Dr. Scott (192 kHz G) Many of the

radios used for his customers in Los Angeles shipped to San Jose, since they are for the identical frequency, 100.3, and work there.

CA Santa Monica KCRW "89.9 +E (Russian; replacing music), TX 92 kHz data.

CO Denver KVOD 99.7 Dr. Scott (coming soon), 92 kHz, TG MI Ironwood WIMI 99.7 no SCA, had sports relay and open carrier; sports not heard in over a year, and no more open carrier; O

network on main carrier, replacing T network. NY Buffalo WNYF-FM 104.1 no SCA now, had Muzak

NY New York WPIX-FM 101.9 to quote from one of the hourly announcements given on 92 kHz: "Foreground music 1 from Muzak," r, with our reporter saying the lady doing the announc-

"sounds like a reject from announcing school, but she'll do!" NY Rochester WYOR 100.5 no SCA (had music); S network on main channel (from ABC-FM); middle of the road and rock (mr). ND Minot KMPR "88.9 talking book for the blind

KHHT 97.1 no SCA, although had SCA permit OH Piquette-Troy WPTW-FM 95.7 confirmed no SCA (had music) OH Van Wert 98.9 WERT-FM t music ("coming soon") OK Broken Arrow (Tulsa) KQZZ 92.1 TG (Dr. Scott, 92 kHz) / OR Portland KYTE-FM 101.1 TG (Dr. Scott, 92 kHz) PA Altoona WFBG-FM 98.1 Muzak, now IDs on main carrier with Johnstown-State College

Geographical coordinates

game plagues WICN

PA Pittsburgh WSHH 99.7 TX data, "Wish-100," on main channel, sometimes fraudulently spelling it out as WISH. SC Anderson WANS-FM 107.3 no SCA (had audible telemetry) TX Fort Worth KPLX 99.5 Dr. Scott (92 kHz tG) WV Clarksburg WKKW 106.5 TX (telemetry)

More FM format changes--from "Orlando [FL] Sentinel" FL Cocoa Beach WSSP 104.1 b, no NRDC

FL Melbourne WVTI 107.1 rm, no Network FL Ocala WFUZ 93.7 S [Associated Press network] WMFO 92.7 U [United Press radio network]

FL Titusville WJAX 98.3 r, listed as ABC-FM, but I doubt that, as ABC's current (and older) lists do not show this

READERS' REPORTS AND OTHER NEWS New FMAdas due approximately May 1, 1986, the 10th edition. Advance orders will now be accepted from club members. Send

\$8.95 for the book, which includes shipping. List price without shipping is \$8.95. Shipping will be by bulk or book rate. If you absolutely want it by first class mail send an additional \$1.50.

Two or more copies \$7 each. Make checks payable to Bruce F. Elving and specify that you are ordering the 10th edition.

Coming through with all the CA SCA news this month was Lyle Henry, chief engineer, KIQQ (which will continue with those call letters, even though their slogan is K-Lite) Los Angeles. He

shared with us the result of calling "every FM station in LA and Orange Counties" about their present and future SCA plans. He

says K261AB 100.1 Newhall has vertical polarization only, 1 watt with two final amplifiers to feed two antennas. "One points north-west to Newhall and the other northeast to Canyon Country from the translator site on the hilltop we call Loop Canyon Electronics Site."

A Florence AL translator, W276AM 103.1, made TV news when a Huntsville AL station showed the antenna on a tower,

"which didn't look to be over 40 or 50 feet above ground, and a portable AM-FM cassette stereo with cable from the headphone jack feeding the transmitter. The news story did not say if the

translator was licensed or not. Could be set up like the translator in the POPULAR COMMUNICATIONS article you wrote." Keith:

Pugh said the article mentioned it as relay WAPI-FM 94.5 Birmingham AL, but I show it as a WJBB-FM 92.7 Haleyville (for the comet?) AL translator. But if it's being fed from a "boom

box," who knows what stations it'll translate from time to time? Keith says WOGC "90.1 Huntsville AL has a very weak signal now.

"But I'm not arguing! I only have three other ID'd stations on 90.1, the third one on Jan. 17, WHMC-FM Conway SC sign-off. Funny I can't get WEPR Greenville SC; it's so much closer."

T. K. McVey is not starting a rumor about Greenville MS "Z-98." "That was my mistake. They are still WBAQ, b \$ 97.9. [In Knoxville tn] WKCS "91.1 is on the air during school hours M-F with

mono rock. No other changes noted in east TN, a stable place these days."

WICN "90.5 Worcester MA announced in their Oct. program guide about going to the channel 27 tower with more height.

Then in January, they wrote: "On the fifth of December, we received word from Hill Broadcasting, the owners of the channel 27 tower where our transmitter is located, that we were to vacate

the premises by 20 December 1985. This started a whole flurry of activity involving electricians, tower companies, engineering consultants, the FCC, moving vans and our own staff members.

The end result is one which will affect WICN in the most positive way. The Worcester Science Center has graciously agreed to be the host of the WICN transmitter... the Science Center will house our transmitter and allow us to recycle their tower previously used

for wind generation as the antenna site. There is a temporary setback in our current situation. Since we must use a nondirectional antenna, there will be some of you who may not be able to hear us

quite as well... Plans are afoot to purchase a new directional antenna and build a new tower to allow all our friends to hear us even better than before." As I understand the situation, Channel 27 got

mad at WICN when WICN was filing an application for a license for the channel 27 site, and discovered that the geographical coordinates listed for channel 27 were wrong. They correctly reported

this error to the FCC, and that got channel 27 corporate heads spinning, and resulted in the FM station's ouster. Now, going back a few months, who wants to report the World Trade Center and

Empire State Building tower site as having errors in their geographical coordinates, as we have discovered in this column? It happens often and stations shouldn't get so uptight about it.

WICN 90.5 fm

WICN subscriber Richard Steinberger says "The WICN signal has dropped here so it is poor on portables, and the multipath meter hits 30 to 40% on my tuner. The Jan. reference to the nondirectional antenna must imply a drop to their old 2.3 kw power level. I'll have to take a drive over and look at this 'tower'."

Larry Fuss sent a story about WARM-FM 99.7 Atlanta going to a new top 40 format and possible change in call letters. They "outspont just about every other station in town with its fall advertising and promotion campaign and the market still refused to embrace them. Now they're going to try this. I feel sorry for desperate people," says WZGC 92.9 program director John Young. Larry Fuss muses: "A great way to build up a consistent following." Then he sent a new call letters' logo for KCAJ 95.9 El Dorado AR. Watch for:

KIXK 96

It will be "Kicks 96," with no decision about any format change. WZGC 92.9, Z-93, maintains its lead in the Atlanta Arbitrons, with WKLS 96.1 in second place. Also in Atlanta news, Nick Lombardi sent an article "Battle Stations, Atlanta Radio is a War Zone." The article quotes Atlanta radio consultant Lee Abrams: "AM radio is almost dead. It's just a matter of time, say 10 years. Same thing as the phonograph record, now we've got CDs." And "AM's grim future is already being lived out at WQXI AM. Once Atlanta's number one Top 40 station, it finished 17th in the fall Arbitron ratings. General manager Jerry Blum admits the future direction of the station is now under review and a programming decision will be reached by March 1st, he says." Abrams says Atlanta is "one of the better radio markets, with well-executed formats. It's got a lot of stations that are new and real committed; plus others that have been around a long time and honed-down their formats."

Nick: "I would be curious to know how the FCC's new coverage curves you mentioned... differ from the old ones (other than being metric)." Some quick examples, Nick, are for Class A stations at maximum 300 meters and 3 kw. I show them at 16 miles primary and the new curves would put them more like 14½ miles. Class B stations (50 kw, 492') I list at 32.5 miles, while the new curves would show them at about 32 miles. This is based on a quick use of the curves, and I am sure Larry Fuss could explain further. "If you do decide to eliminate network listings, I hope you will at least keep the NPR data (and it's much more useful in the by-geographical section). Note that if you design your data base correctly, your output should be able to look any way you want it to; whether or not you've gone to a computer should not be used as an excuse to radically reformat everything." See my comments, Nick, about networks (particularly at the end of Roger Winsor's network list), and my observation that some public stations have APRN instead of NPR. In addition to WVPE, I believe KUSC 91.5 Los Angeles has shed NPR. And I am not looking for an "excuse" to reformat my data. If I go to the computer it will be a great opportunity to modernize my data. I am not about to take any drastic changes if I remained manually typing the data from keypunched output cards. I have the computer, but output has not been good; getting surplus-flores @ symbols for many capitals. The firm in NY I bought it from is trying to debug the system, and feel there is a ground connection in my ESC Composer that is loose. This is being typed on my old Standalone Composer, mainly because I have a surplus of excellent ribbons for this machine, and want to use them up! I can still operate the other machine, sans computer, by taking off the cover, and plugging in three sets of plugs into the original planar board. I've installed the new board, cable, etc. and the installation seems fine. And Nick mentions from the March Stereo Review in which Julian Hirsch "feels that the new 'FMX' stereo broadcasting system (for stereo as quiet as mono in fringe areas) will become very popular. So there is yet another thing for you to start keeping track of!"

But there's another side to the FMX system, as the Oct. '85 SCA: Radio Subcarrier Report points out in an article, "CBS/NAB FM System Could Have Side Effects for SCA; Ignorance Prevails for the Market." Tests of the system were conducted over WPKT 90.5 Meriden [sic] CT, a station which has no SCA, and later concerns have arisen about interference to or from an SCA with the DBX system in use. "However, several engineers we spoke with expressed some doubts about the full compatibility of FMX and subcarriers, both in terms of crosstalk from the difference channel into SCAs, and crosstalk from SCAs into the main channel. I am concerned about whether it's going to greatly increase the susceptibility of receivers to crosstalk from the SCA," says Eric Small, Modulation Sciences, Inc. According to Small, one of the most positive develop-

ments in the SCA business during the past decade has been the universal acceptance of the phase-locked loop FM detector, which has virtually done away with 'birdies' stemming from SCA interference. PLLs have a very high rejection of quadrature information, he says, so extra circuitry will be needed to pick up the FMX quadrature channel. This, he says, could restore the 'birdie' problem. FMX may also threaten analog SCA services, according to John Kean (former National Public Radio engineer—ed.). Kean says cost considerations force SCA receiver manufacturers to use 'less than ideal' bandpass filters to reject information from the adjacent stereo subchannel. In some cases, extra energy due to FMX could spill over. FMX is not close enough to reality to warrant the effort of tests, says [the marketing director] at Johnson Electronics, Inc. Small, for one, is generally skeptical of FMX, which he calls 'a solution in search of a problem.' He does not expect it to be widely adopted, suggesting instead that it will suffer the same fate as Dolby B broadcasting: 'It's a cute idea, but I can't believe it's going to fly.' I have talked to Small and found him to be one of the most knowledgeable people around on the subject of FM main carriers, as well as SCAs. He developed "Optimod" and the firm's "Sidekick" FM-SCA generators.

An article W. R. McIntosh sent concerns KNAC 105.5 Long Beach going all "heavy metal." I already listed them as p for progressive rock, so how is "heavy metal" categorized, r? Please, don't send me any tapes or air checks of KNAC or similar stations! I'll take anyone's word! "KNAC's format change has caused an uproar, especially among listeners who had loyally supported the Long Beach-based station's eclectic, alternative-rock play list. The KNAC format switch has clearly overjoyed one key group of listeners—the army of record execs who see radio exposure as an important tool in boosting heavy-metal album appeal," and the station is cited as filling a programming void. Another article he sent is about hard-nosed former KNBC-TV news director Irwin Safchik teaching and directing volunteer students at KCSN 88.5 Northridge CA, a station without an SCA. Mc comments: "KCSN is just about dead center in the San Fernando Valley. With 3000 watts you might think they were well situated for their share of the 1.5 million potential listeners. Actually, they have problems. Most 'big' FM stations here are to the east and south of the Valley. So only those who are directly west of KCSN (and have their antennas pointed east) or those who have nondirectional antennas can get full fidelity reception. All others get KCSN off the sides or backs of their antennas. The FM receiver we have convenient for listening has a fixed antenna pointed southeast, and KCSN sounds horrible. . . . Noted your change of address. Guess your escrow finally cleared." [You're right, while waiting for it to clear we had our money invested and made about \$1500 interest for that period.]

CKLN 88.1 Toronto, now with 250 watts at a higher EHAA, now comes in with improved stereo in St. Catharines, says Steve Tuura. He claims U. of Toronto, CIUT, has been granted 15 kw at 89.5, but I doubt that; I think it's only an application. He also claims CING to move from 107.9 to 102.9, another thing I question. "CIAO 104.9 is setting up its schedule and goes on again next month [March, 1986], 50 kw, Stereo, Skylon Tower, Niagara Falls." Again, I disbelieve the latter, but other reporters in the area should be able to check on the accuracy of that prophecy. Anyway, he sent a nice color postcard of Horseshoe Falls. Rimshotter WRDW Wrens GA getting a mighty boost from its site in North Augusta SC on translator W261AP, licensed to Augusta GA. "Good coverage for 1 watt. Full stereo 8 miles away," says Tracy Wood.

The exciting frequency changes in Indiana are described by Ralph Strobel: "At 0000 on 1-16, I was on 93.5 waiting for WZ-WZ Kokomo to move to 92.7. About 30 seconds before they moved, WWWW Hartford City turned on their transmitter for testing. I dialed to 92.7 to find a dead carrier on. In seconds, WZ-WZ was on their new frequency with an ID. At 0055 Hartford City gave their first ID and was playing music while testing. After 0200 WWWW went off permitting '93-WXUS' Lafayette to be blasting in, with an ID at 0229 and AP news. At 0600 WOKZ 104.9 Muncie signed on. I taped the first five minutes and saved it. WWWW also signed on at 0600. WOKZ is 24 hours, but 93.5 WWWW signs off at midnight. . . . No signs of *89.5 WFCL Franklin IN on air. WDDS 90.5 Muncie IN still claims 26 watts, so still using 10 watt transmitter. I can't find WDUB Granville OH on *91.1 as yet. . . . WITT 93.5 Tuscola IL seems to be deleted for good." [Not yet, FCC shows it as still licensed!] An article Ralph sent mentioned that many of WOKZ's employees are students. And he says WZQR 106.3 in Columbia City IN is off the air again!

"Why would anyone in Washington IN want a translator rebrand-casting WZQR? Seems rather illogical, even if the station had stayed on the air. . . . No sign of WCXL *89.5 Kettering OH." Ralph, there won't be any WCXL. *89.5 is to be shared by WDPR and WDPS Dayton OH, each with 200 watts h & v, 200'.

In Buffalo NY ratings, sent by David Nieman, WBBN (AM) with the help of carrying the Buffalo Bills games, come out on top. Next in line were WJYE FM, WYRK FM, WBUF FM, WPHD FM, and WVKB (formerly WKWB). Dave says: "In the local rumor mill, the new WVKB AM owners are looking to pick up one of the area's floundering FM outlets. Having an FM station would help boost their sales. It would also let them use their high-paid staff to simulcast." [At least 25% of the time—Ed., unless the rule is done away with and 100% simulcasting were permitted.]

Paul L. Gaines sent articles on how many stations have changed owners in Detroit in 1985, like WJOL 97.1 and WNIC-FM 100.3, and WRIF 101.1, WLLZ 98.7, WDTX 99.5, WQRS 105.1, WLTI 93.1, as well as across-the-river CJOH 88.7. Two other stations that may soon be sold are WKSJ 102.7 Mount Clemens and WCZY 95.5 Detroit. And there have been many d-j changes, some of which were outlined in recent issues of RadioFiles and other industry papers. WMJC 94.7 Birmingham has changed to mainly rock (r), and further changes are contemplated to recapture listeners. The station's latest ratings gave them a 1.5 share. ABC is now monitoring drug use at its stations, and WHTT 96.3 is quoted as saying they have a strong drug policy and have for some time.

Correction on the above about WMJC. Robert Grant says they have softened, and are mr (in evenings) and at other times are leaning to m with the \$10,000 hiring of Alan Almond, who was a popular afternoon announcer on WNIC-FM. Price Communications bought WNIC-AM-FM. "Who is this Price Communications?" muses Robert. "They buy a famous a/c station, WOWO (IN) and change the evenings to talk while keeping a/c during the day, then they buy an FM and run it commercial free to try to make the other FM competitors look weaker. . . . Local AM notes: Paul Gaines' report is correct, WNZK is on with e and in 3½ months I have not yet heard a single ad. I am told the owner was offered more than \$500,000 for the station before it went on the air (it is a daytimer with 500 w and a directional antenna aimed away from the listening area and plastered with alternate-channel interference).

. . . The comments on AM tech on page 7 of 1-86 VUD made me shriek! Particularly 'those who think AM can sound as good as FM must be living in some kind of dream world.' FACT: AM is in the process of [improving] . . . its audio. AM sounding as good as FM is not a matter of opinion or taste, but rather a clear-cut scientific fact. . . . Those who have been listening to radicos no better than Atwater Kents pulled from Model T's have the mistaken idea that AM is limited in transmission quality to the point where it cannot sound as good as FM stereo. Unfortunately, some of these people have political power within the FCC. . . . There also seems to be nearly no demand for wide-area coverage radio anyway. This shows in unbelievably low shortwave broadcast listenership, the failure of a direct-satellite TV service, very low listenership to existing AM skywaves at night and low listenership to strong FM signals from moderate-distance cities where nearby locally-sent signals are available. . . . FM, with more than 2/3 of the U. S. radio audience, is a success because it provides excellent audio quality to areas less than 100 km in diameter (even when coverage is greater than that). If AM is to prosper, it must be as similar to FM as possible (in terms of tech, that it is known that it is practical to make AM very similar to FM). But the public, the retailers of receivers, receiver manufacturers, the FCC and yes, even the broadcasters, have through poor audio and simulcasting, killed progress toward this aim. "But there is a silver lining to this cloud. Small, imaginative, upstart companies are working on even greater developments for medium-frequency broadcasting that might not have been possible if AM stereo had become widespread reality."

I've finally copied Max Engel's 1948 paper, and here is WHTT-FM on the Hartford dial:



Their slogan, "For the finest in FM." FMusic included Boston Symphony Orchestra, The Concert Hour, Metropolitan Opera Auditions, The Detroit Symphony. No heavy metal there, unless it be the clanging symbols in the percussion section! FM Drama included Theatre Guild on the Air and Mayor of the Town (with Lionel Barrymore?). FM Comedy: Henry Morgan, Groucho Marx;

FM variety: Bing Crosby, Break the Bank, Stop the Music, FMystery: This is Your F. B. I., Gangbusters, The Fat Man. FM Youth: Storyland, Quizdown, Junior Town Meeting, Land of the Lost. FM Public Opinion: America's Town Meeting, Hartford Speaks, Walter Winchell and Drew Pearson. Also from their ad: "Here are a few of the advantages that come to you with FM: Clear, bell-like reception; elimination of static and electrical disturbances; no interference or fading caused by other stations. In brief—FM offers an entirely new experience in radio enjoyment. . . . The finest equipment has been installed by WHTT-FM in order that you may hear the station's programming faultlessly. If you live anywhere in Connecticut, you may be sure that when your FM dial is set at 106.1 you are listening to radio at its best."

I'll try to have more historic pictures and tidbits later.

Some other strange information came from a Quebec reader of my "Atlas." He admits the following is not complete, and I wonder if he might have heard of applications, not on air stations. Mirabel PQ "new station" 104.9, French. CQO-MF? "new station la basse Laurentides PQ, 103.1, French." And on p. 108 of my "FM Atlas" he correctly points out I have the wrong coverages shown for CHFA-4 Hinton AT, not 19 and 54 miles, which he thought were too far. They should read 8 and 31 miles.

Saul Chernos sent an item on FM from another DXer, Marc Maring IL, via Ken Onychuk. Saul says: "I'll hopefully be at Jamestown, NY (WTFDA) and maybe ANARC in Montreal. See you there?"

Danny Buntin sent much station news from OK and says: "Been a while since I last reported to you, but then there hasn't been a lot going on in this part of the country, though noticed in your column translators are still expanding, can't seem to get most of them. . . . I would like to get an Onkyo T-9090 tuner but the mail order places I've checked don't seem to have it in stock. Seems difficult to find a top of the line FM tuner anywhere. I figure I could use one to replenish my interest in FM DXing. I look forward to ordering your new FM Atlas."

Helping out with the ABC network listing was Roger Winsor, who said: "This was easy to do and I'm glad I could do it for you. Like I said in the note: WKIO 103.9 Urbana is now on at 2300 w from their new 370' tower; is all over the dial in my apt. Also WEIU *88.9 is on, sign on at 4 p. m. with news until 6:30 then jazz and even later blues and old rock. Their signal is fair to poor and suffers from WKYU QRM and also WVJC *89.1 splash. . . . If I can help again don't hesitate." And thanks again, to you, Roger, for a job well done.

[Yorkshire NY. Not yet on the air, according to Dave Nieman: WYEF *91.9 / Rod O'Connor has read that both the KSKA translators in Palmer, K208EC *89.5, and Talketna, K205BB *88.9, are on the air. I must have neglected to mention K205BB, since he said he has not seen anything in the VUD on it, so the above is the information I have. Allin Alaska, of course.

In FCC news, the FCC has advised that petitions proposing more than two channel substitutions "generally" will not be entertained. That means that stations like WOKZ 104.9 Muncie might not be able to come on in the future. At least three stations had to shift channels to enable Muncie to get 104.9. The program guide of KCGN 101.5 Ortonville MN claims a Clara City translator will be on soon on 99.7; I have not even seen an application filed for that frequency, and I understand the FCC is not granting translators on class B/C channels, at least for the present. Their Willmar translator on 106.3 has been upgraded.

I have an article published in the Jan. 28, 1986 issue of Current, "for people in public telecommunications," entitled "The Sad Fate of Public Radio in Nebraska." I outline the 10-year opposition to public radio by commercial broadcasters and quote Bud Pentz of KMAZ (FM) Beatrice in exhorting his colleagues to cough up \$3,000 to pay a lobbyist to defeat a public radio bill in 1981:

"Your check for \$100 would be most beneficial, or for that matter, any amount. . . . Make your check out to Nebraska Broadcasters Association Defense Fund. Mail it to: Dr. Larry Walklin, treasurer, Nebraska Broadcasters Association, PO Box 82422, Lincoln NE 68501. . . . Let me give you one reason why you should. If you don't help with the payment of this fee, and we lost the job, and LB78 becomes law, guess what. . . . You're going to have nine more FM operations in the spectrum and your tax money will pay for the construction, legal fees, engineering, and the operation of the same for the rest of your time on earth. . . . After the bill was defeated, Pentz wrote the NBA membership: "You need to write a letter to each of these senators who voted in opposition to LB78. Remember, we did it with a vote of 28 to 12, with 9 not voting. Get out your letter writing machine and start now. . . . I mean 'rat now'. . . . And thank them for giving us a state WITHOUT PUBLIC RADIO for one more year."

And Tom Cornell sent an article showing how WZWZ Kokomo

WZLZ
93 FM

advertised its move to 92.7 Jan. 5. The station celebrated its move by having a party at Biggs Lounge in the Ramada Inn, Hwy. 31, from 9 p. m. to 1 a. m. Tom's comment: "At long last, the move is taking place." Waldo Bishop sent an article in which it is asserted that **WAMM AM**, a daytimer, is the city's number one rated station. It is a black-oriented and staffed station, and is the AM side of WAMF *90.5 (Florida A&M University).

Some of you may have seen the Jan. 6 "Broadcasting," p. 186, a small piece called "Pirate Hunt." "FCC announced it has shut down pirate radio station 'KSMR' Minneapolis, which was operating on 105.1 mHz, unassigned FM frequency." Other cities where pirates are believed located were listed, and Lyle Henry tells me 104.7 in Los Angeles is a favorite spot for pirates (none of which has SCA) to hang out.

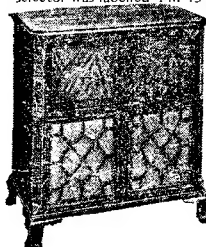
Well, I have heard a rare tape of the bust of 'KSMR.' The FCC was notified the station was on the air, and even though it was a weekend, the FCC man promptly drove to the area, called the person who complained, and told him to get a tape ready. The pirate left the air briefly and came back on, this time with the FCC guy saying "This is the FCC. We are closing down 'KSMR' because it does not have a license." Silence.

The FCC man whose office is in ST. Paul MN, disclosed that the station had excellent equipment, much better than some commercial stations. It did not take him long to find the pirate. I told the person who complained that I disagreed with his method. I would have tracked down the pirate myself (not that difficult with a directional FM antenna, map of the city so you can plot the beam, a car radio with FM and possibly a low-sensitivity portable radio so you can pinpoint it to the exact house, once you find the neighborhood), knocked on his door while he was broadcasting, and found out how friendly he was. If not friendly at all, and he was causing interference, then and only then would I have notified the FCC. I say this with a background of pirate radio broadcasting myself, including the first year of KUMD Duluth broadcasting, which was entirely extra-legal AM, using a phono oscillator and longwire antenna and later a 250-watt transmitter on 880 kHz. FCC Citizens with information on pirates are asked to notify the FCC. In charge, Box 1588, Grand Island NE 68802-1588; (308) 382-4296. When I was in Kearney and reported to them my own illegal FM transmitter, it took them six months to respond and order me to quit broadcasting—they did that by mail, certified, return receipt requested. No door-knocking or confiscation of equipment. KUMD when it was turned in, had the complaint addressed to KUOM (AM) in Minneapolis, because the FCC did not know a branch of the University of Minnesota existed in Duluth. Soon after that KUMD went off FM, which is a long story that began with pirate broadcasting of which I can proudly say I was a part.

I believe "KSMMR" had stereo, and that no equipment was confiscated, although the station's operator was no kid, probably in his 30s. In another Minnesota station close-down, which apparently had nothing to do with the FCC, a Minneapolis Star and Tribune article said: Two of the *Twin Cities'* newest radio stations have been taken off the air. It wasn't because of low audience ratings, however, even though they did broadcast *course fairly dull stuff*. The stations were low-power FM outlets at the State Capitol that began carrying floor sessions of the Minnesota Senate and House at the end of the 1985 session. The stations, at 88.1 and 89.1 on the dial, interfered with the signals of two commercial (?) stations and couldn't be heard in the State Office Building, where

MARCH, 1986

Walter Kowalczyk, PA, writes: "In this digital age, I hear stations giving their exact frequencies now, which is good. This past Sept., passing thru Harrisburg, I had the chance to see an old Zenith console radio that tuned the old FM band as well as 88-108. The selector was labelled 'FM-45' and 'FM-100' as well as AM, of course."



A regal beauty featuring the
ords with the Cobra Tone
SHORTWAVE, and TWO
organ and large Concert Gr.
ord space in mahogany. Chip
tubes plus phono tube plus
indicator plus rectifier tube.

NEW ZENITH "CHIPPENDALE" 2-band FM. I just happen to have a picture! From 1948, text reads: "A real beauty featuring the New Way to Play Records with the Cobra Tone Arm plus STANDARD, SHORTWAVE, and TWO BAND FM radio. . . 9 radio tubes plus phono tube plus tuning indicator plus recifier tube. \$425.00. Stern & Company, Wholesale Distributors, 210 Chapel Street, Hartford 1, Conn."

"Scanning the dial for any new SCA, I heard WPNT simulcasting KDKA (AM). I don't know what this was all about, as it is the baseball off-season, and the stations are no longer commonly owned. . . Normally, the SCA is off except for baseball—but at one time they simulcast continually. An idea: now that the FCC deregulated SCA and anything can be carried on it, commonly owned FM and AM stations should simulcast the AM program on SCA. With you (and others) selling receivers, this could eventually prove profitable to the stations. I can think of WOKU having SCA equipment gathering dust since the blind reading service they used to carry folded. It would cost next to nothing to operate and nothing to program, the AM program being at the common transmitter site. Although I can see their tower out my bedroom window, about 6 miles away, their AM signal here is extremely poor at night. If I could get it on SCA, I might be inclined to tune in once in a while. I was in Mount Pocono PA in 1981 and could not hear the 92.1 translator you have listed. Instead, I heard the Nanticoke station on that frequency, coming from about 40 miles away.

"Commonly owned TV-AM stations could carry the AM on the new TV SAP channel, for which receivers are becoming readily available. Radio Shack even has a stand-alone TV stereo sound-SAP receiver for sale. This, and the SCA idea above, could be the way to 'save AM', putting it on an FM radio system whose signals go places without all the disturbances typical of AM. Some daytime AM stations could be authorized to operate at night with powers of as low as 5 watts. One of us has tried it and couldn't hear it ¼ mile away, but there are the disbelievers who are trying to make something of this. Better they should leave an SCA channel, then maybe someone might actually hear them!"

More about pirates, this time from Ernie Wilson's "Experimental Broadcaster's Newsletter," Vol. 3, No. 1, write him at Box 130, Paradise CA 95969. "The FCC has recently renewed its effort to shut down unlicensed stations. From the reports we get, however, we come to these conclusions: 1) The FCC is understaffed; 2) they tend to ignore unlicensed AM and FM stations; 3) they respond to complaints about interference; 4) monetary forfeitures (fines) range from \$100 to \$500; 6) sometimes they will confiscate equipment; 7) sometimes they use a verbal warning with no other penalty; 8) if you play 'ignorant of the law' game . . . I didn't know I was doing wrong, they may be easier on you."

Walter Patton, or somebody, sent me a booklet on how citizens can take part in decisions of the CRTC. Probably the best way to change policy in a way that will help DXers is to urge them to give more complete technical information on stations in their news releases, and writing them at the address on the previous page would be a good idea. I am not sure I will find the time to do so, but I am sure any of you could put in your own words why they should do this, and the point will get across where it should.

AND, I'VE GOTTEN INFORMATION FROM DAVID A. SINCLAIR, VANCOUVER BC, WHO ENJOYS READING THIS COLUMN. HE SENT AN ITEM FROM THE PROVINCE, HIS CITY'S MORNING NEWSPAPER, ON VARIOUS APPLICANTS FOR VANCOUVER FM CHANNELS. CONSENSUS SEEMS THAT AN APPLICANT PROPOSING A COUNTRY MUSIC FORMAT MAY HAVE AN INSIDE TRACK. IN CANADA, THE MUSIC FORMAT YOU PROPOSE HAS A BEARING ON WHETHER YOU WILL GET A LICENSE, UNLIKE IN THE U.S. THE CRTC CONTROLS ON PROGRAMMING ARE BEING OPPOSED BY CANADIAN COMMERCIAL BROADCASTERS. "THIS MEANS THE FM BAND IS HEAVILY REGULATED ON MUSIC, TALK AND NUMBER OF COMMERCIALS, WHILE THE AM BAND IS RELATIVELY FREE," SAYS PIERRE NADEAU, CANADIAN ASSOCIATION OF BROADCASTERS. CONTROLS, LIKE ON CANADIAN CONTENT IN RECORDS, MAKE IT VERY HARD FOR STATIONS IN VANCOUVER TO COMPETE, "BECAUSE FM RADIO IN WASHINGTON STATE IS UNREGULATED. WE'RE GETTING A LOT OF COMPETITION FROM THE SEATTLE AREA," SAID ONE* BROADCASTER. AND DAVID SENT 10 SHEETS OF CRTC INFORMATION ON HEARINGS IN VANCOUVER 93.7, 95.3, CHILLWACK 107.5, ABBOTSFORD/NORTH VANCOUVER 104.9, AND VICTORIA 92.1 AND 100.3, AND IT WAS HE WHO SENT THE ITEM ON CRTC PARTIAL BROADCASTING TO WALTER PATTON. ANYWAY, THANKS FOR ALL YOUR CONTRIBUTIONS. THIS MONTH I'LL HAVE THE THICKEST FILE EVER, AND I HOPE YOU EXCUSE ME FOR ALLOWING SOME OF IT TO GO ASTRAY AND WIND UP IN THE WRONG ENVELOPE.

Hartford Times, *berg Firm*
March 29, 1948 *ers in FM*



EW WORLD, Stromberg Carlson's Model 1210, provides reception on both standard and FM bands. Housed in a cabinet of bleached mahogany veneer, the Selektor-Lite can play only band in use. Record-changer with feather-light pick-up, 10 or 12-inch records in sequence.

First to Produce
U.S. Line of Cars

William Caltan was the first to manufacture to produce a full line of FM receivers that he in 1939 and the company has been a leader in FM development. He is also a manufacturer and a broadcaster.

When Ma, Edwin H. Armstrong's wife, died in 1961, he

by some of the leading furniture stores in the country." The Stomboy's stylish endures evidenced in the 1970s when after the rise of popular cabinet models which have caught the eye of the young generation, for whom has required the company to return these models to the market. The most recent example is the distinctive Hepplewhite cabinet, another design which has been revived.

Ma's son, Edmund, is a fourth generation Chinese model. Per-

the script of one of his plays. "I was in the middle of writing it when I was asked to write these days Bing's book," he says.

Bing could not resist. He wrote the book in this quest was fought in his hospital.

Bing replied, "That's wonderful. I'll do it."

"Thanks," said Bing.

CONTRIBUTORS: Waldo R. Bishop, Tallahassee, FL; Louis R. Briones, Laguna Niguel CA; Danny Butts, Stillwater OK; A. C. Chamberlain, Hinsdale NV; Saul Chernos, Paris ON; Tom Cornell, Greenview IN; Barry Fuss, Jackson MS; Gary Galloway, St. John's, NL; Jim Gorman, Grand Rapids MI; Gregory S. Harbo, Ft. Lauderdale City CA; Bob Hempel, Mammoth IA (who sent the same story that was in a month ago about KUCCB #89.3 Des Moines in Iowa); Walter Kowalczyk, Grand Rapids MI; Bill Lutz, Waukegan IL; Walter Kowalczyk, North Huntingdon PA; Nick Lombardi, Atlanta GA; Charles B. Lowell, Minot ND; W. R. McIntosh, Granada Hills CA; Deane D. McIntyre, Edmonton Alberta (is that correctly abbreviated AT or AL?); Robert M. Miller, San Francisco CA; Ed. J. Niemann, Akron NY; Rod O'Connor, who sent a nice card showing where he is, living, Kodiak AK, with white-peaked mountains behind it; Merrill Oliver, Waters Information Services, Southampton MA; David P. Patterson, Littleton CO; L. L. L., Winter Springs, FL; Craig W. Pattillo, Portland OR; Walter Patton, Willsey Shore PA; Kelvin Pugmire, New Hope LA; Franklin and Richard Reese, Jersey Shore PA; David A. Shogren, Princeston MD; Ralph Smith, St. Paul MN; William E. Smith, Jr., Westport CT; Tom M. Raab Strobel, Muncie IN; Stephen Tuura, St. Catharines ON; E. R. Wilson, Paradise CA; A. G. Williams, Verdun PN; Roger Winsor, Champlain IL; Tracy Wood, Hepzizah (Augusta) GA; And a mystery contributor from the Midwest, who sent me a copy of the book "The World We Live In". Nothing's held over for next month, except for an ever-increasing file of historic FM pictures and documents, and a Los Angeles FM band spectrograph, now under study on 99.5 when KHOF was off-air, and not yet being broadcast.

TELEVISION NEWS

Bill Fahber, editor
336 Atlantic Street
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FORUM, PART ONE

Mail has been a little heavy, so I decided to get a head start on the column. Quite a bit of international news, including the Caribbean area, several contributors of Canadian news, and even French television.

W.R. McIntosh sent the article on French television, from the 12/19/85 Los Angeles Times. Up to now, French television is entirely government-controlled. But now the government is allowing private commercial channels to compete with the government channels. But critics fear that French television may sink to the levels of Italian television. The government awarded the first license to a French company which is connected with Silvio Berlusconi, who runs a commercial television empire in Italy, programming American soap operas, syndies, and movies with heavy amounts of commercials. The decision to grant the license to that company has political implications, as Berlusconi is on good terms with socialist government officials in Italy and France. Competing for the license was a group of three stations: Radio Monte Carlo, Radio Television Luxembourg, and Europe 1. Right wing opposition warned that, if it comes to power after the elections, it will sell off two of the government stations to conservative interests as commercial stations. The French senate also plans an investigation into the selection of Berlusconi's organization. The new channel, designated Channel 5, will also be available on the upcoming French Broadcast satellite, TDF1, reaching a potential audience of 200 million. Presently, the French government operates three broadcast stations and a cable channel. Although commercials are allowed, they do not interrupt programming. It had been said that government involvement with the stations stifles creativity and distorts news coverage.

W.R. McIntosh also sent three articles about the SIN affiliates, which are having legal problems, as was mentioned last month. FCC Administrative Law Judge John H. Conlon ruled that the licenses of thirteen SIN affiliates should not be renewed because they are illegally controlled by a Mexican television magnate. The 13 stations are owned by either the Spanish International Communications Corporation (5 stations), Bahia de San Francisco Television Company, Seven Hills Television Company, and various other owners of repeater stations. By law, foreign ownership of domestic television stations can not exceed 20%. None of the companies mentioned above have exceeded that limit, but the FCC based his decision on an "abnormal relationship" that could put the stations and companies under an even greater influence by Mexican media baron Emilio Azcarraga and his family. The family had made loans to the

American companies, had selected some of the employees, and had made them dependent on them for influence and direction. According to the lawyer for the companies, Conlon had not found any indications that the public had been harmed or that there was any intention to violate the law. The FCC also questioned the relationship between the Spanish International Communications Corp. (SICC) and Spanish International Network (SIN), a Mexican company mostly owned by Televisa, owned by Azcarraga. SICC and SIN are both owned partly by Reynold Anselmo, who is president of both. Both companies share the same New York headquarters. The loans in question had ended 15 years ago, were used to establish the television stations and were known of by the FCC at the time.

The second article questioned the effect of the FCC's decision on the Spanish community. SIN reaches 82% of them, offering them a tie with their cultural past. An alternative to the judge's decision could be to reorganize the stations' ownership and control, making it more Anglo controlled, which would be a slap in the face to the Spanish community.

The stations did appeal the decision to the FCC's review board, according to a third article. This suspends the revocation proceedings and allow the stations to continue operating for as long as several years until the review board makes a decision. And even after that, they can ask the FCC itself to review the decision of the review board.

HBO and Cinemax are now scrambling their satellite signals, according to another article sent in from Mc. They started scrambling on 1/15/86. Most of the other pay-TV services, and two of the networks, plan to start scrambling their signals by the end of the year.

Another blow to satellite antenna owners came from the FCC. According to another article, the FCC ruled that communities can not outlaw satellite dishes in order to promote local cable TV systems, but can still ban them if they interfere with the public health, safety or welfare or if they conflict with "reasonable and clearly defined" aesthetic values. But one group contends that because aesthetic standards are subjective, opponents of earth stations could devise any type of aesthetic standard they wished in order to prohibit the antennas.

Other miscellaneous articles: The National Endowment for the Humanities granted \$750,000 each to WGBH-TV in Boston and KCET in Los Angeles, on the condition that they match three times that amount in private donations. PBS, on the lookout for more subscribers, will be advertising their programs on network-affiliated stations in two cities (Rochester NY and Toledo OH) as a test to see if it gains viewers. The Sacramento County Superior Court ordered eleven California television stations to air the California Lottery's "Big Spin," and left the way open for the state to sue the stations to recover the production cost. Stations hadn't been airing it because

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of its low ratings. Funding for the program was supposed to come from advertisers, not from lottery funds, but its low ratings had failed to attract enough sponsors.

Rupert Murdoch, owner of 20th Century Fox and six Metromedia stations, announced that he has no plans to purchase any more television stations. Westinghouse sold its Group W Cable, the nation's third largest cable TV operator, to a group of five cable companies. It is believed that the five will eventually divide up the Group W outlets among themselves. Capital Cities and ABC finalized their merger, and are now Capital Cities/ABC Inc. NBC will also change owners later this year when RCA and General Electric merge. Two Boston stations, ABC affiliate WCVB-TV and PBS outlet WGBH-TV, will begin closed-captioning their local evening news programs beginning in March. Viacom International will be buying CBS-owned station KNOX-TV, St. Louis, MO, for \$122.5 million.

It was reported previously that United Cable Television of Los Angeles was having trouble meeting its deadline to wire homes in the San Fernando Valley for cable TV. United was already fined \$121,875 for failing to install the first 50 miles in time, and it would not make its next deadline of 270 miles by 1/31, thus facing a \$100,000 fine.

One article noted 1985 as "The Year of the Takeover." CBS successfully fought Ted Turner's \$5.8 million attempt to take over; Capital Cities bought ABC for \$3.5 billion, and General Electric bought RCA, parent company of NBC, for \$6.28 billion.

W.R. McIntosh attributes the fact that the Los Angeles Times carries so much television news to the interest of Hollywood readers in the area. He also learned that "VEA" as in KVEA, the Spanish station on channel 52, is Spanish for "look at," so their slogan, "VEA 52" really means "look at 52."

Another more recent article on the SIN situation just in. This is an editorial, stating that the FCC decision to not renew the licenses of the SIN affiliates may work out for their benefit. It would force them to find American Latinos who are willing to invest in the stations. One reference to foreign influence is the daily news program, "24 horas," which is produced in Mexico City and has an obvious slant toward the Mexican government.

As a result of his acquisition of MGM/UA Entertainment, Ted Turner could be forced to pay high dividends on stocks until they are redeemed. This would be unlikely, but should it happen, he could very well lose control of Turner Broadcasting System in a few years.

KNBC-TV, ch. 4 in Los Angeles, beat NBC in reporting the explosion of the Space Shuttle Challenger. Because of that region's interest in the aerospace industry, the station interrupted the "Today" show for the launch. Viewers of KNBC and of Cable News Network, which also carried the launch, saw the incident as it happened.

Robert Goodman writes, "I was surprised to find WPXI-TV being repeated on channel 17 here (Bronx, NY -wbf)....W17AC had been on since Jan. 3. Since WPXI-TV (11) had gone to

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the World Trade Center and discontinued their old Xtr on channel 73, viewers in mid-town Manhattan had suffered." "W17AC is on the Empire State Building and has a 30° wide beam pointed uptown (approx NNE) to fill in the shadow cast by the ESB from WTC. It takes 1 kw final input, delivering 6.8 kw ERP, horizontally polarized, with aural as 10% of the total. Uses direct feed, not repeating (over the air -wbf)." WNET-13 is also considering a repeater on the Empire State Building. "According to Glenn Hauser, Sri Lanka has inaugurated TV: VHF, system unknown."

Newspaper clippings from **Bob Hempel**: KOIA-TV, ch. 17 in Ottumwa, IA, plans to sign on the air in early February. KOIA is the former LPTV on ch. 42 that went off the air in August, 1985. Also, KCBR-TV, channel 17 in Des Moines, changed its call sign to KDSM-TV. Included was a new logo, which I will hold off on printing because of possible problems with glue-ons with the new publisher. Maybe next month.

Randy Miltier writes about Gene Scott's former station in San Francisco. "The station is now KWBB...and, so far, all they carry is ...Dr. Gene Scott! I turned it (him) on today and he was pushing satellite dishes. He told everyone that if they purchased this dish they could receive him 24 hours a day. According to an article in the 1/14 San Jose Mercury News, Gene Scott rents time on channel 38 from 9 p.m. to 6 a.m. every night, and also during the daytime on Sunday. "He has that time because, just as he said when he lost his license to run Channel 38 last year, the new owners have no studios, no transmitter and no programming. So they are selling time to the good doctor rather than run 24 hours of snow." The owners of the station are not divulging any information about their plans for the station.

From the 1/28 San Jose Mercury News, a report that KQEC, ch. 32 in San Francisco, is now programming a new schedule different from KQED-9, which it used to repeat. KQEC is now broadcasting adult educational programs in the late afternoon, current events and politically-oriented programs during prime time, and children's educational programs on Saturday afternoons. KQED, which owns KQEC, had wanted to make the change earlier, but was unable to because of the extra cost it would require. But with a record \$22 million, it is now able to. Also, the abolition of the must-carry rule made it necessary to make the station worth carrying by cable companies. Another incentive was that several groups had challenged KQED's license to operate KQEC.

Bill Johnson reports that WFBN, ch. 66 in Joliet, IL, is now WGBO-TV as of 1/1/86, and is advertising 5 million watts ERP. The station supposedly applied for call letters WGBN-TV according to Television Digest, and the station had been licensed for 5 million watts since it first went on the air in 1981. It could be that they were operating under reduced power for a while. Has anybody seen increase in signal strength on the station, and can anybody confirm the new call letters as either WGBO-TV or WGBN-TV?

Follow-up on the report about KOSHU in Houston, TX. Donald J. Marshall reports, "...KOSHU is now on Satcom 4, transponder 18. They showed up just before Christmas." "They were going to be on 24 hours 7 days a week and...were going to get a 1-800 number to take requests. They also ID as TV-5 but their main title is Video Hits U.S.A. and they are stereo."

Dave Nieman writes, "I still haven't seen any positive sign of WTZA-62 Kingston, NY; thought it would be seen much of the time. Its signal here is like WTEY-54 Poughkeepsie's; nonexistent. It must be because of the Hudson River Valley." Also a short clipping from the Buffalo news, speculating that WNYB-TV, ch. 49 in Buffalo, might be planning to go on the air soon: the station had begun purchasing syndication rights to a cartoon series and movies.

As I promised, more international news this month. Richard Clark from the Dominican Republic, reports on the Caribbean and Central America. WKPV, ch. 20, Ponce, PR, went on the air 10/85, WAPA-TV network. WUJA, ch. 58 in Caguas, PR, went on 12/4/1985, and is TBN. (What is that? -wbf) W58AA in Caguas, as a result, had to shut down. Other new stations include ch. 13 in Nevis, St. Kitts, which is on 24 hours; ch. 21 in Guatemala City, Guatemala. Under construction are ch. 5 in St. George, Grenada; ch. 13 in Tegucigalpa, Honduras; and a yet unknown channel in San Salvador, El Salvador. Also, WRWR-TV, ch. 30 in San Juan, PR, is on the air with movies only. WSJU, ch. 18 in San Juan, is now stereo.

Fred McCormack says that KTHI, ch. 11 in Fargo, ND, was off Jan. 11-15 because of transmission line problems. But local cable companies were able to establish a link with NBC network programming. On 1/12, CBS affiliate KXJB-4 broadcast NBC coverage of the AFC football game.

CANADIAN NEWS

Several reporters this month with news from Canada. To start, here is the regular report from Walter Patton from the Canadian Gazette. Walter writes, "The change of CKVU Vancouver from Ch 21 to 10 is dependent upon there being no interference to cable reception of KCTS (9) Seattle WA on BC (British Columbia -wbf) systems; the CKVU transmitter and the cable headend are both located on Saltspring Island. There were 30,000 signatures on a petition to the Commission protesting the CKVU channel change. The folks in Vancouver take their PBS viewing seriously. About two thirds of the money raised by KCTS's 'begathon' comes from BC. A few years ago KCTS even tried to put a transmitter on Orcas Island (Ch 34 Bellingham) but were forced to withdraw when sufficient funds were not available."

NEW STATIONS:

QUE Montreal; ch. 35; 566 kw; Four Seasons; French language station. Competing application by Television de Montreal denied. QUE Wakeham; ch. 24; 0.1 kw; to repeat CBMT, ch. 6, Montreal (CBC)

CHANGES GRANTED:

BC Vancouver; CKVU-TV; ch. 21 to 10; 880 kw to 285 kw; see note above.
MB Dauphin; CKYD-TV, ch. 12; 63 kw to 50 kw; replace tower destroyed in March, 1983.
MB Brandon; CKYB-TV, ch. 4; 55 kw to 45.16 kw; replace tower destroyed in March, 1983.
MB Brandon; CKX-TV, ch. 5; 44 kw to 41.7 kw; replace tower destroyed in March, 1983.
ON Owen Sound; CICA-TV-12; ch. 12; 41 kw to 52 kw.
PQ Iles de la Madeleine; CBMYT, ch. 7, to rebroadcast CBMT (6) Montreal instead of CBC Anik; 2.9 kw.
PQ New Carlisle; CBVN-TV, ch. 45; 5.19 kw to 5.32 kw.
PQ Trois Rivières; CHEM-TV, ch. 8; 5.12 kw to 123.2 kw.
SA Debden; CBKFT-3, ch. 22, to rebroadcast CBKFT (13) Regina instead of CBWFT (3) Winnipeg; 2.9 kw.
SA Gravelbourg; CBKFT-6, ch. 39; same as above; 19 kw.
SA Leoville; CBKFT-11, ch. 31, as above; 10.7kw.
SA Moose Jaw; CBKFT-10, ch. 16; as above; 0.695 kw.
SA North Battleford; CBKFT-12, ch. 41; same as above; 10 kw.
SA Ponteix; CBKFT-7; ch. 22; same as above; 19.4 kw.
SA Prince Albert; CBKFT-2; ch. 3; same as above; 13 kw.
SA St. Brieux; CBKFT-4; ch. 7; same as above; 0.14 kw.
SA Saskatoon; CBKFT-1; ch. 13; same as above; 98 kw.
SA Willow Bunch; CBKFT-8; ch. 21; same as above; 9 kw.
SA Zenon Park; CBKFT-5; ch. 21; same as above; 6.9 kw.
SA Regina; CBKFT, ch. 13; no longer repeating CBWFT, ch. 3, Winnipeg, Manitoba.
NW Pine Point; CBEBT, ch. 4; reduced from 7.9 kw to 0.262 kw.
NW Inuvik; CHAK-TV, ch. 6; reduced from 3 kw to 0.122 kw.
("As outlying transmitters in the Yukon and Northwest Territories begin to be fed directly by satellite they no longer require a high or medium power station from which to receive their signal. As a result the power of these central transmitters is being reduced and it will become much more difficult to DX either of these areas.")

CALL LETTERS:

AT High Prairie; ch. 13; CIRE-TV (I don't have any information at all on this station. -wbf)
NF Gillams; ch. 13; CBYT-12
NF Hampden; ch. 13; CBNAT-23
NB Memramcook/St. Joseph; ch. 48; CICV-TV
ON Barry's Bay; ch. 19; CBOT-2
ON Maynooth; ch. 51; CBOT-4
PQ Montreal; ch. 62; CFPU-TV.
APPLICATIONS:
ON Woodstock; ch. 31; 70.6 kw; to repeat CITY, ch. 57 in Toronto.
APPLICATIONS FOR CHANGE:
NS Yarmouth; CBHFT-1; ch. 3; 1.9 kw to 19.5 kw
BC Fort Nelson; CBUGT; ch. 8; 0.05 kw to 1.07 kw.

From David A. Sinclair in Vancouver, B.C., several newspaper articles. From the 1/9/86 Globe and Mail, a national newspaper, an article on a proposed Canadian "superstation." The station referred to is CBET in Windsor, Ontario. "The CBC plans to penetrate the U.S. market with a 'superstation' that would send Canadian programs-made by private and provincial networks as well as by the CBC-by satellite to cable companies throughout the United States. According to the plan...the CBC would transform its Windsor station into a so-called superstation...." "The proposal would have to be approved by the Canadian Radio-Television and Telecommunications Commission." "The proposed channel would send the CBC's normal schedule of news, current affairs, documentaries, drama, science and children's programs deep into the U.S. market. Canadian private broadcasters, such as CTV and Global, and the National Film Board and provincial educational networks, would be invited to join the network. But if they show no interest, the CBC would proceed alone. CBC's French-language network, Radio-Canada, would not be involved in the channel...." "CBC's Windsor station was chosen because of its unique situation within the public network's string of owned-and-operated stations. Because it is so close to the large Detroit market, CBET is not permitted to broadcast many popular U.S. programs...." "For Canadians outside Windsor, the new channel would mean they would be able to receive two CBC networks."

From the Winnipeg Free Press, opposition from the CBC and CTV to a proposal by a cable television company to change its list of American stations offered. "Winnipeg Television stations could face dire consequences if a federal agency allows Detroit satellite signals into the city, the CBC and CTV networks say. In separate briefs to the Canadian Radio-Television and Telecommunications Commission, the networks have registered strong opposition to a proposal by Winnipeg's cable companies to replace North Dakota signals with those from Detroit." "Four Detroit major market superstations in a single local Canadian market is drastic and unfair competition for the local broadcaster," said Gordon Noble, CBC's director of corporate affairs. Noble said there is a serious danger that viewers will watch substantially less Canadian television if the applications are granted, when a similar application was approved in Saskatchewan, the market share for the U.S. stations increased from 10 to between 20 and 30 per cent, he said. "Greater Winnipeg Cablevision is applying to replace its North Dakota feeds with all three major American networks from Detroit as well as the Public Broadcasting Service in Detroit. It says Detroit signals are stronger and better quality."

Two articles from the Vancouver Province, dated 1/28/78, report on a pay-TV problem in that area. It involves a Bellingham, WA, television station owned by Charles Griner, and a pay-TV service, Selec-TV of California. Dan Forrer rents the facilities to air the

pay-TV service. He also owns Selec-TV Antenna Sales, a Canadian corporation with no connection at all with Selec-TV of California. While viewers in the United States have to pay monthly for decoders to watch Selec-TV, he has the freedom to sell antennas and decoders to people in Canada. Nearly 200 Canadians forked over about \$300 for the equipment and about \$70 for installation. But the signal from the Bellingham transmitter was cut off after only six months of service when its owner cancelled his contract with Forrer. Forrer still claims that the movie channel will be back on the air soon. Meanwhile, the federal consumer and corporate affairs department is checking Forrer's business out.

From the 1/9/86 Vancouver Sun, "The CBC wants to reduce sports coverage, eliminate all U.S. commercial TV programming from its English-language network, establish more specialty channels and step up its commitment to Canadian drama." "The CBC also wants to extend this profile south of the border by setting up a 'superstation' to send Canadian programming by satellite to cable companies south of the border. Among the key recommendations: Elimination of all U.S. commercial TV programs on the CBC English network by Sept. 21, 1987, apart from 'certain high quality' programs not generally available. This would raise the Canadian content level to 90 per cent.... Establishment of a second CBC-TV channel to showcase programming from the regions and provincial broadcasting organizations such as Alberta Access and TV Ontario. This second channel would also offer 'second chance' viewing of popular programs offered on the main service."

The 11/30/85 Winnipeg Free Press gave more detail on the switch of U.S. network affiliates to be carried by a Winnipeg cable company. Actually, it includes Videon, another cable company there. Reasons for the changes are given in detail. Firstly, they can receive a better signal of the Detroit stations by satellite than the North Dakota station over the air. The North Dakota stations argue that the difference is insignificant. Secondly, there is increased viewing time. The Detroit stations are mostly 24-hour operations while North Dakota stations offer 16 to 18 hours. A third factor involves time zone and programming differences. Detroit is in Eastern time zone, and North Dakota is central, but there is no difference with network programming, since Central time zone stations and Eastern stations broadcast simultaneously. But the North Dakota stations point out their coverage of Winnipeg sports, calendars of Canadian events, and weather reports that are relevant to Winnipeg. Prairie Public Television claims that 27 programs now shown on their station will not be available on WTVS, the Detroit PBS station, but Cablevision maintains that WTVS carries a higher quality programming because of its larger audience.

Paul Gaines also sent an article about the proposed Canadian Superstation, CBET, ch. 9 in Windsor. "The Windsor station was chosen because of its unique programming schedule. Located just across the river from the large

Detroit market, CBET is not permitted to broadcast many popular U.S. programs shown on the CBC's other stations, because Detroit stations have the air rights. As a result, CBET's program schedule is heavily Canadian. "While independent television producers in Canada have lauded the CBC's plans, American television producers are less enthusiastic. A top-level executive of the (PBS) quoted in the Toronto Star, said that if the 'superstation' goes on the air, PBS will have to drastically reduce the number of programs we buy from Canadian suppliers." "At least one Canadian television executive also has come out against the plan. John Bassett, a former chairman of Baton Broadcasting, which owns the largest independent television station in Canada, CFTO, called the plans for a superstation a 'pipe dream. Canadians don't watch Canadian content generally. They watch American shows,' he said. CFTO, which broadcasts in the Toronto market, carries about 90% American programming and regularly beats the Toronto CBC affiliate in prime-time ratings.

Bruce Elving sent an article a few months back from the 7/26/85 Toronto Star about stereo television in Canada. "Canadian programmers say they're in no hurry to start broadcasting in stereo. Starting tomorrow, Toronto's Channel 47 becomes the first Canadian station to offer viewers enriched sound. But CBC-TV sources say the network commissioned a study by its engineers and is not rushing into the market. CTV says it has no plans to broadcast in stereo."

I think this spacing problem with my typewriter is progressively getting worse.

CONSTRUCTION PERMITS REINSTATED

FL Panama City; WMJA, ch. 28.

CONSTRUCTION PERMITS CANCELLED

KS Topeka; KKEC, ch. 43
GA Brunswick; WHJF, ch. 21
MO Sikeston; K DCQ, ch. 45
MT Lewiston; KMEC, ch. 13
NM Gallup; KIEB, ch. 3

APPLICATION REINSTATED

TX Katy; ch. 51; Louise Bronson.

APPLICATIONS FOR NEW TELEVISION STATIONS

CH ERP HAAT STATE/CITY/APPLICANT
63 4100 1158 NJ Newton; Bogner Newton Corp. (amended)
29 33.1 1519 CA Eureka; Charles M. Lohr
22 221 747 MN Brainerd; Northern Minnesota Public Television Inc.
65 3981 2146 VA Blacksburg; Cascade TV Ltd.
41 250 1156 VA Charlottesville; Central Virginia ETV Corporation
32 1330 1670 CA San Francisco; Minority Television Project (application back in 1983, reinstated.)
50 5000 967 CO Denver; Gali Communications
59 5000 1156 CO Denver; Don T. Moore
66 1778 1294 NJ West Milford; New Jersey Public Broadcasting Authority.

APPLICATION RETURNED

FL Miami; ch. 35; Kilgore Broadcasting (too close to WBFS-33?)

APPLICATIONS DISMISSED

UT Salt Lake City; ch. 13; Intermountain Broadcasting Inc.; Mountain West Television Company; Utah Television Associates Limited Partnership; West Valley City Television Associates Ltd. Partnership (specified West Valley City).
CA Eureka; ch. 29; Sacramento Valley Television Inc.; Capitol Foothills Broadcasters.
NV Reno; ch. 11; Reno Telecommunications.
NJ Burlington; ch. 48; Burlington TV Inc.
VA Roanoke; ch. 60; Brahman Communications; Roanoke TV 60 Broadcasting.
CA Bakersfield; ch. 48; Gamez Communications Ltd Partnership.
FL Clermont; ch. 68; Big Chief Broadcasting; Non-Pr ofit Television Concepts.
FL Miami; ch. 35; Canal 35 Ltd.
FL Palatka; ch. 63; American Communications & Television Inc.
FL Venice; ch. 62; Venice Communications Ltd. Partnership.
HI Honolulu; ch. 5; Family Media Inc.
LA New Orleans; ch. 49; Albert Inc.; Horizon Broadcasting Inc.; NOLA TV.
ME Presque Isle; ch. 62; Allan M. Weiner.
NV Reno; ch. 11; Gloria Tamers.
LA Baton Rouge; ch. 44; Louisiana Super Communications; Baton Rouge Channel 44 Ltd. Partnership (Review Board, upholding initial decision).
FL Miami; ch. 35; Coral Way Broadcasting Ltd; Cuban-American Ltd; Adib Eden Sr.; First Latin women Broadcasting Inc.; Grace Broadcasting Network Inc.; Lamar Communications Inc.; Miami Broadcasting Inc.; Miami 35 Corp.; Minority Broadcasting Corporation Inc.; Range Communications Limited Partnership; Spanish Broadcasting Corporation. (Initial decision)
MS Wiggins; ch. 43; South Mississippi Broadcasting Company Inc.
AK Anchorage; ch. 5; Minority Broadcasters of Alaska.
CO Castle Rock; ch. 53; Castle Rock Communications Ltd.; Virginia Cordova Kelso & Daniel Cordova; Dorothy O. Schulze.
FL Gainesville; ch. 61; American Communications & Television Inc.
KS Pittsburg; ch. 14; Family Broadcasting Company, Inc.

CONSTRUCTION PERMITS GRANTED FOR NEW STATIONS
13 8 3881 UT Salt Lake City; Salt Lake City Family Television Inc. (Review Board decision)
62 5000 625 IN Hammond; Jovon Minority Broadcasting Corp. (FCC decision, confirming the Review Board's reversal of the initial decision)
44 5000 1975 LA Baton Rouge; Parish Family Television Ltd. Partnership (Review Board decision)
65 5000 859 VA Ashland; Christian Communications Inc. (Summary decision)
35 5000 1174 FL Miami; Miami Latino Broadcasting Corporation (Initial decision)
53 5000 965 CO Castle Rock; Christal Communications Corp.
61 3444 936 FL Gainesville; Gator Broadcast-

ing Limited Partnership
14 5000 204 KS Pittsburg; John M. Leland

APPLICATIONS TO MODIFY CONSTRUCTION PERMITS
41 205 297 LA Alexandria; KHCA
65 3090 2651 CA San Jose; KLVN-TV
28 500 438 FL Panama City; WMJA (which had been reinstated)
53 1250 1169 TN Cleveland; WFLI-TV
21 4207 n.c. VA Lynchburg; WJPR
16 5000 507 MO St. Joseph; KTAJ
55 5000 731 NY Amsterdam; WOOD
49 4136 1235 NY Buffalo; WNYE-TV
55 2890 1504 PA Lebanon; WGGF
58 5000 1962 CA Stockton; KSCN-TV
44 2138 975 TX Harlingen; KLUJ (is this on? I have it licensed, with an ERP of 9.2 kw, but no sign on date.)
63 5000 1040 IN Bloomington; WIIB
41 205 297 LA Alexandria; KHCA
50 1200 486 NY Watertown; WJCK
51 3011 917 ME Portland; WPXT
36 515 502 TX Odessa; KOCV-TV
20 100 849 PR Ponce; WKPV

CONSTRUCTION PERMIT MODIFICATIONS GRANTED
35 5000 1368 IL La Salle; WMTQ-TV
16 5000 507 MO St. Joseph; KTAJ
32 105 971 PR Aguadilla; WKUU (correction of last month's figures)
52 1355 601 OK Oklahoma City; KSBI
68 1442 1029 AL Birmingham; WCAJ (as amend.)
62 2221 454 MA Lawrence; WNEP

APPLICATIONS TO CHANGE EXISTING FACILITIES
10 316 1953 CA Sacramento; KXTV (CP)
43 5000 1071 OH Lorain; WUAB (CP)
55 5000 1691 FL Leesburg; WIYE (MP)
19 4646 n.c. OH Cincinnati; WXIX-TV (MP)
7 316 1869 SC Charleston; WITV (MP)
7 316 1947 LA Lake Charles; KPLO-TV (as amended; CP)
33 5010 1995 MO Springfield; KSPR (CP) Is the FCC going to pass that ERP?
11 316 2000 AZ Tucson; KMSB-TV (CP)
14 5000 1876 LA West Monroe; KARD (CP)
22 5000 2000 NC Raleigh; WLF L-TV (CP)
8 79.4 580 OK Sayre; KVIJ-TV (CP)
5 60.3 2700 OR Medford; KOBI (lic mod)
9 316 827 WA Seattle; KCTS-TV (CP)
13 316 1950 CA Stockton; KOVR-TV (CP)
15 2630 1180 LA Lafayette; KADN (CP)
17 1000 1300 MN St. Paul; KTGI-TV (CP)
52 60 1080 NH Keene; WEKW-TV (CP; also applied for STA to operate at 50% power)
58 1321 726 NJ New Brunswick; WNUB (CP)
57 2630 1560 KY Hazard; WYMT-TV (MP)

FACILITIES CHANGES GRANTED
FL Leesburg; WIYE, ch. 55; granted MP to raise antenna to 1691.1' AAT/1670' AG/1724' ASL.
WV Clarksburg; WBOY-TV, ch. 12; granted CP to raise ERP from 129 kw to 262 kw.
NC Concord; WUNG-TV, ch. 58; granted license to cover CP for changes; see 6/85 VUD.
AR Little Rock; KARK-TV, ch. 4; granted license to cover CP for changes; see 11/85 VUD.

FL Jacksonville; WJCT, ch. 7; granted license to cover MP for changes; see 5/84 VUD.
SC Columbia; WLTX, ch. 19; granted license to cover CP for changes; see 8/84 VUD.
WV Clarksburg; WBOY-TV, ch. 12; granted CP to reduce antenna height to 860' AAT/572' AG/2024' ASL (21' lower); raise ERP from 129 kw to 262 kw max.
SC Charleston; WGBD-TV, ch. 2; granted MP to change antenna height to 1950' AAT/1940' AG/1957' ASL (1108' higher ASL); TL to Awendaw Section, Seewee Road, 4 miles northeast of Ten Mile, Charleston County; coordinates 32°56'24"/79°41'25"; Azimuth 510, 15.52 miles from present TL.
CO Durango; KREZ-TV, ch. 6; granted license to cover CP for changes; see 12/85 VUD.
SC Charleston; WCSC-TV, ch. 5; granted MP to change ERP from 100 kw to 100 kw max; 1960' AAT/1956' AG/1970' ASL (923' higher ASL); TL to 3.4 miles northeast of Ten Mile, east of Hwy 17-701, Southeast of its intersection with Seewee Road (same TL planned by WCIV-4 and WITV-7); coordinates 32°55'28"/79°41'58" (Az. 43°, 12.11 miles from present TL).
MO Kansas City; KOPT, ch. 19; granted license to cover CP for changes; ERP raised from 984 kw max/868 kw hor to 1042 kw max; 1170' AAT/1192' AG/2019' ASL (same AAT, 30' lower ASL); same TL.
NY New York; WCBS-TV, ch. 2; granted license to cover CP for changes; ERP reduced from 42 kw to 21.38 kw max/20.32 kw hor; 1578' AAT/1577' AG/1622' ASL (278' higher AAT/112' higher AG/107' higher ASL); TL to #1 World Trade Center; coordinates 40°42'43"/74°00'49" (2 miles SSW of former TL on the Empire State Building).
CO Montrose; KREY-TV, ch. 10; granted license to cover changes; ERP raised from 3.09 kw to 6.16 kw max; 115' AAT/94' AG/6374' ASL (35' higher AAT but 18' lower AG and ASL); same TL.
NY Syracuse; WCNY-TV, ch. 24; granted license to cover MP for changes; see 8/84 VUD.

CALL LETTER APPLICATIONS: NEW STATIONS
CH C.L. STATE/CITY/APPLICANT
2 KDTN TX Denton; North Texas Public Broadcasting Inc.

CALL LETTER APPLICATIONS: STATIONS ON THE AIR
66 WGBO-TV IL Joliet; WFBN (This explains the discrepancy reported in FORUM, where I had record of WFBN applying for WGBN-TV)
33 KDAF TX Dallas; KRLD-TV
5 WNYW NY New York; WNEW-TV
24 KAZR AR Fort Smith; KPOM-TV

CALL LETTERS GRANTED: NEW STATIONS
28 KOOR IA Cedar Rapids; Metro Program Nt.
65 WLXV MD Cumberland; Gary D. Terrell
35 WUCX-TV MI Bad Axe; Delta College
51 KFAA AR Rogers; MCC Communications
59 KBBL CA Big Bear Lake; Felice-Tec
68 WCOB-TV OH Mansfield; WLCH
19 KCJA NM Santa Fe; CRA Broadcasting Limited Partnership

CALL LETTERS GRANTED: CHANGE EXISTING
 11 KMSB-TV AZ Tucson; KZAA (not KSMH, as was reported in the 8/85 VUD)
 26 WGBA MI Green Bay; WLRL
 39 WHTN TN Murfreesboro; WFPZ
 27 WHLL MA Worcester; WSMW-TV
 3 WMTT MI Kalamazoo; WKZO-TV
 17 KMIZ MO Columbia; KCBJ-TV
 17 KDMS-TV IA Des Moines; KCBR
 66 WGBQ-TV IL Joliet; WFBN
 11 WLII PR Caguas; WKBM-TV

NEW STATIONS ON THE AIR

PR Mayaguez; WTRA, ch. 16z; signed on 12/14/85, as per report by Richard Clark; 90 kw max/30 kw hor ERP; 1123' AAT/133' AG/1347' ASL; TL Road #711, post 0.7 km, on Mt. Atalaya, Aguada; coordinates 18°19'06"/67°10'42" (same coordinates for WJNX-TV, ch. 22); Application was originally by Ramon R. Nieves, who proposed it to be a satellite of WRWR-TV, ch. 30, San Juan. Both stations have since changed ownership. WTRA now owned by New Saga Inc.
 PR Ponce; WKPV, ch. 20z; 102 kw max ERP; 822' AAT/94' AG/2063' ASL; TL Az. 315° (that's due NW) of Penueles; coordinates 18°04'46"/65°51'11"; coordinates match those for WTTN-14, WQTO-26 and WIEC-48. Station signed on sometime in 10/85; affiliated with WAPA-TV network; owned by Multi Media Television Inc.
 PR Caguas; WUJA, ch. 58z; signed on 12/4/85; 55 kw max ERP; 1078' AAT/110' AG/1782' ASL; TL northwest of Caguas on Rd #173; coordinates 18°16'40"/66°06'38". Educational station, owned by Community Television of Caguas.
 AL Montgomery; WMCFTV, ch. 45-; signed on in November, 1985; 250 kw max ERP; 303' AAT/319' AG/513' ASL; TL along Hwy 80, 3 1/2 miles east of Montgomery; coordinates 32°22'59"/86°11'19"; independent station; address: Life Anew Ministries Inc., 6261 Atlanta Highway, Montgomery, AL, 36117.
 AZ Phoenix; KUTP, ch. 45z; signed on 1/1/86; 3020 kw max ERP; 1792' AAT/348' AG/2966' ASL; TL on South Mountain Park, 8.3 miles south of Phoenix; coordinates 33°20'01"/112°03'32"; coverage should be slightly greater than KTVW-TV, ch. 33. Address: United Television Inc., 4631 S. 32nd St., Phoenix, AZ, 85040.
 IL Quincy; WTJR, ch. 16z; signed on 1/1/86, but there was a report of it testing on 8/6/85; 179.2 kw max ERP; 994.45' AAT/880' AG/1620' ASL; TL Columbus Road, 2 mi. north of Quincy; coordinates 39°57'03"/91°19'42"; Address: Believers' Broadcasting Corp., Box 3112, Quincy, IL, 62305.
 MD Baltimore; WKJL-TV, ch. 24z; data reported last month; address: Family Media, Inc., 4820 Seton Drive, Baltimore, MD, 21215.
 TN Greeneville; WETO, ch. 39-; went on the air 11/8/1985; 3000 kw max ERP; 2628' AAT/141' AG/4981' ASL; TL to Camp Creek Rd., Bald Mountain; coordinates 36°01'24"/82°42'56"; Address: East Tennessee's Own Inc., Box 1074, Greeneville, TN, 37744.
 AL Mobile; WMPV-TV, ch. 21z; went on in December, 1985; 4335 kw max ERP; 1428' AAT/

1401' AG/1534' ASL; TL on Rte 97, 0.9 mile south of Rte 10, Elsanor; coordinates 30°35'18"/87°33'16"; coordinates 30°35'18"/87°33'16"; same coordinates as WJTC, ch. 44 in Pensacola, FL; with ERP much higher and AAT only slightly lower, it should produce a clearer signal than WJTC; address: Rel-Way Partnership, 4141 Pine Forest Road, Suite 109, Cantonment, FL, 32533; independent station.
 IA Ottumwa; KOIA-TV, ch. 15z, is expected to go on the air sometime in February, according to an article sent in by Bob Hempel; the station had formerly been operating as K42AM, which went off the air in 8/85.
 DE Wilmington; WBOT-TV didn't make its target of January, 1986; look for it any day now.
 CA Sacramento; KSCN-TV, ch. 58, targeted for March, 1986.
 PR Caguas; WKBM-TV, ch. 11, targeted for March or April, 1986.
 PR Ponce; WSUR-TV, ch. 9, also targeted for March or April. Both owned by American Colonial Broadcasting Corp.

FORUM, PART TWO

I would like to make a few comments on Morrie Goldman's letter on p. 17 of last month's VUD. He suggested such ideas as a computer bulletin board, and a computerized TV STATION GUIDE that could be updated each year. Presently, I have been working on such a list, but it's nowhere near complete, so I haven't suggested any plans for printing a new TVSG. I know of a few club members who have Commodore 64 and 128 computers, such as Tom Yingling, Don Blevins, and John Combs, and myself. And there may be others. The two lists I've been working on are (1) List by state, city, callsign, with networks but with no technical data, using Speedscript, a word processing program by COMPUTE! The modified version of Speedscript that I use can print single-spaced. (2) List by channel, state, city, using MULTIPLAN, a spreadsheet program.

I also want to give a special thanks to Larry Fuss for sending me a complete data base of U.S. stations with Canada and Mexico within 250 miles. It filled in many gaps in my own records, and updated several areas that were outdated. As a result, this month's column is much more accurate, as will future columns. And I'm about ready to throw out this typewriter.

From Tom Yingling, an article from the 12/5 Baltimore Evening Sun. WBFF-TV, ch. 45, is in the process of receiving approval from several government agencies to construct a transmitter tower Druid Hill Park. WBFF offered \$25,000 a year donation for upkeep of the park. The Board of Recreation and Parks approved of the idea, but a private group called "Friends of Druid Hill Park," are opposed to the approval. With friends like that.... From the 12/18/85 Evening Sun about WKJL, ch. 24, "It will go on the air at 6 o'clock Christmas morning with its standard fare which will include a lot of religious programming, a variety of old chestnut series and a few pretty expensive

syndicated network rerun programming. Channel 24 start ed out some eight years ago as a license (sic) given to a group called Jesus Lives, Inc. that was going to put a Christian -oriented station on the air. That group eventually handed the license over to another such group called the Look Up and Live Ministry that also failed to raise the needed capital to get the station off the ground. Neither group could find a suitable place to build an antenna. So it's coming on the air, just under the dead line required by its license (sic), with its antenna finally fixed to the one owned by Channel 54 (WNUV), as the property of a newly formed group called Family Media, Inc. That's a company that has no specific religious affiliation, but the principal in Family Media is Sam Moore, who is also the principal in Thomas Nelson Publishing, a big religious publishing house in Nashville, Tenn. "We're going to be an independent television station in the Baltimore market," Ken Buschman, the new station's general manager, said yesterday. "We're going to be a viable alternative offering family programming. You can describe our philosophy as the whole-man concept. We hope to educate, to teach, to inspire, to provide all the other things that a person may need. But we will be a real, commercial independent station."

Bob Seaman, who wrote a few months back and just recently joined the club, sends some more information on television in the Hazleton, PA, area. "Apparently WDAU Ch. 22 in Scranton, PA has installed a new transmitter in the beginning of October, but their signal strength has not changed at all, apparently their ERP is unchanged. Their signal has always been marginal here in Hazleton, PA which is about 45 miles from their transmitter. Is their ERP 750,000 or is it higher?" (try 1560 kw -wbf) Bob noted that and a different figure, both either wrong or outdated, in TV Factbook and Broadcasting Yearbook. Ma n, this typewriter has to go! He also reports that WOLF-38 in Scranton, hopes to raise their antenna an other 300' in the future. WWLF in Hazleton, ch. 56, hopes to raise their ERP around the same time.

Bob asks for some advice in setting up some equipment. "I plan to put a UHF amp on my antenna and I have 300 ohm foam twin lead on it presently. Should I change to 75 ohm cable for UHF?" From what I have heard, 75 ohm is better. "Our local supplier stocks Blonder-Tongue U-2 amplifiers for about \$40. Is that a good unit or should I get something else?" I can't answer that, but here's hoping some WFF DA member will add some of their thoughts on a good preamp. Bob sent an article from the 1/24/86 Philadelphia Inquirer. "With Big 5 college basketball heading toward the home stretch, the chances of any local games being seen this season are fading faster than Michael Jackson. Hang it up, sports fans. It's over. When the Big 5 and channel 61 announce d their five-year, 75-game package in September, it was with the optimistic understanding that the Wilmington-based

station would be on the air by Dec. 1. No such luck. After countless construction delays, the latest target date for the station is Mar ch 3, according to Daniel G. Slape, Channel 61 president and general manager."

David A. Sinclair gives the story on KONG-TV, ch. 16 in Seattle. "This station was scheduled to come on air Feb. 1/84 and have the original King Kong movie. This did indeed upset KING-TV. KONG-TV has not yet come on air. I phoned KONG-TV and they hope to come on the air by May 1/86. Two articles sent in by David explain part of the problem. Cougar Mountain residents are upset about the construction of KONG's transmitter tower on the mountain, which already has 22 antennas on it. Although the EPA says that levels of radiation are safe, residents complain about TV signals coming through the telephone lines, VCR's, lights that don't work, radios that play when switched off, and hearing music in their heads. Other news clippings report that KONG, ch. 24 in Anacortes, WA, hopes to be on the air 3/1/86 with a badly needed ration of movies and old syndies for viewers.

Some articles from Paul Gaines. Knight-Ridder (not named after the TV series) will be purchasing some of the television stations which Gannett Co. just bought from Evening News Association. The stations are in Mobile AL, Tucson AZ, and Oklahoma City. Since buying out the Evening News Association, Gannett had too many stations and was required by the FCC to sell some of them. Capital Cities, which also has to sell some of its newly acquired stations, is selling WXYZ-TV (ch. 7, Detroit) and WFTS-TV in Tampa, FL, to Scripps-Howard. The FCC has allowed, for the time being, Storer Communication s Inc. to keep its Cleveland and Detroit stations even though their coverage areas overlap. Most of the overlap area is over Lake Erie. Overlap between the Cleveland and Toledo stations cover about 128,000 people, but since that situation existed before the 1964 rule barring such overlap, SCT has been allowed to keep both stations. The stations referred to are WJBK-TV in Detroit, WTVG-TV in Toledo, and WKRW-TV in Cleveland. After more than 50 years at Rocker feller Center, NBC is about to move its production facilities elsewhere. It now operates from a building about five blocks away, but is still searching for a permanent location.

That's about it for this month. If I can't get this typewriter fixed, it too will be searching for a permanent location, and I'll give you three guesses where. I heard that a Hammon, NJ LPTV station, W08CC, was scheduled to go on the air in January, but latest report at the end of that month had the owners calling in some experts from Nebraska to get the equipment working. WNEP-TV, ch. 16 in Scranton, now has a new translator: W26AD, located in Allentown-Bethlehem area. Don't know how strong it is.

FM STATISTICS

FM SCOREBOARD

Fred Nordquist
7945 Boxford Road
Clay, NY 13041
Deadline: the 5th

MAR 1986

FM STAT.....

RANK	NAME	LOCATION	TOTAL	88-92	ES	MS	AU	USA	CN	MX	FO	TPU	YB	AS OF:
SORT BY TOTAL														
1	ANDY	BOLIN	IL CHARLESTON	2059	331	799	183	286	45+	7	5	3	61	61 09/04/81
2	PAT	DYER	TX SAN ANTONIO	1923	300	1558	41	0	43+	3	19	4	70	70 01/31/86
3	DANNY	BUNTIN	OK STILLWATER	1620	251	924	4	0	48+	5	9	2	65	74 01/02/86
4	BRUCE	ELVING	MN DULUTH	1496	213	1231	8	7	44+	3	1	0	49	48 03/03/85
5	JOHN	EBELING	MN BLOOMINGTON	1461	234	816	40	79	47+	4	5	0	57	52 01/03/86
6	JIM	PIZZI	MI LANSING	1313	185	1044	27	0	38	5	20	3	66	81 03/04/85
7	MIKE	DALTON	FL CLEWATER	1283	284	692	8	0	42+	3	12	12	70	72 05/01/83
8	RALPH	STROBEL	IN MUNCIE	1271	340	238	50	4	39+	6	1	0	47	72 10/18/85
9	MIKE	BUGAJ	CT ENFIELD	1234	168	666	2	12	37+	4	0	1	43	74 09/12/85
10	FRED	NORDQUIST	NY CLAY	1226	207	592	29	57	39+	5	0	2	47	69 01/17/86
11	FRED	MCCORMACK	ND DES LACS	1098	141	801	25	67	44+	6	4	0	55	65 12/12/85
12	PETER	SHWATZKY	ON KITCHENER	1088	167	500	112	6	38+	7	0	1	47	71 11/11/84
13	BOB	SEYBOLD	NY DUNKIRK	1087	167	532	0	0	41	6	2	0	48	50 10/12/85
14	JOSEPH	FELA	NJ S. PLAINFIELD	1080	227	516	2	9	37+	5	0	3	46	68 06/23/85
15	DAVID	NIEWMAN	NY ALBANY	1079	279	288	37	20	42+	8	0	3	54	59 12/12/85
16	TIM	MCVEY	TN BOLIVAR	1075	151	392	1	1	42	5	11	1	59	77 07/01/83
17	FRED	MCCORMACK	ND FARGO	941	125	619	3	49	47+	5	2	0	54	74 12/12/85
18	RON	LEBLANC	LA NARRAGO	843	129	452	2	0	39+	5	0	6	54	71 11/29/77
19	HANK	HOLBROOK	ND CHEVY CHASE	819	203	216	16	0	35+	5	0	3	44	59 06/28/85
20	ROGER	WINSON	IN HOBART	807	168	211	0	0	32	1	0	3	36	60 03/30/80
21	JOHN	JEFFERSON	CA PLEASANTON	801	164	425	136	0	24	4	4	0	32	57 08/27/85
22	SAUL	CHERNOS	ON BURNT RIVER	768	114	414	48	70	37+	7	0	0	45	77 04/16/83
23	JOHN	EBELING	MN PROSIT	758	143	440	3	5	44+	8	1	0	54	75 01/03/86
24	VERNON	EATON	AR DENTON	724	148	173	1	3	42	5	0	0	55	77 08/30/81
25	R.E.	LYONS	FL BELLAIR BLUFFS	704	200	420	2	0	0	0	0	0	75	08/01/78
26	DAVE	BRUMFIELD	IN MUNCIE	658	141	43	1	0	28	1	0	0	29	78 11/30/81
27	DANIEL	GETTING	PA BROOKLYN	657	151	226	6	3	32+	6	0	0	39	77 11/11/84
28	RICHARD	STEINBERGER	MA HUDSON	648	133	286	12	6	35+	4	0	0	40	58 09/22/84
29	JEFF	KADET	IL MACOMB	609	114	55	4	0	32+	3	0	0	36	83 09/28/83
30	JOSEPH	SMITH	NY JOHNSON CITY	605	80	165	0	0	34+	2	0	1	38	71 04/20/84
31	KEN	SIMON	FL LAKE WORTH	545	148	437	0	0	34+	2	4	0	49	66 07/05/85
32	ALAN	NICHOLEK	MA SPRINGFIELD	514	62	273	0	0	36	5	0	0	41	52 09/05/85
33	DOUG	EVERITT	OK ENID	512	80	299	16	0	32+	4	6	0	43	74 03/17/79
34	JIM	AYERS	TN MURFREESBORO	448	73	18	1	0	27	1	1	0	29	81 02/12/82
35	ROBERT	SOMINSKI	OH ST. CLAIRSVILLE	437	58	70	1	0	27+	2	0	1	31	77 11/25/78
36	PAT	DURKIN	WI WEST ALLIS	428	89	81	0	0	32+	3	0	0	36	78 08/29/84
37	DAVID	ODELL	AR LITTLE ROCK	367	39	112	0	0	40+	4	1	0	46	80 09/23/82
38	THOMAS	YINBLING	MD BALTIMORE	354	54	131	1	0	0	0	0	0	71	04/08/84
39	TED	FLEISCHER	KY LOUISVILLE	349	46	57	0	0	29	4	1	0	34	74 08/06/77
40	PAT	DURKIN	MN WOODBURY	329	51	97	2	0	31	1	1	0	33	81 08/29/84
41	MIKE	HOBAN	IL BURNHAM	315	62	32	0	0	24	1	0	0	25	76 08/16/84
42	PAUL	TRASKA	NY BUFFALO	293	113	86	2	0	31+	3	0	1	36	76 10/29/80
43	BOB	SHOLAREK	NJ OLIVICK	263	60	1	0	0	15	1	0	0	16	78 10/29/84
44	ERIC	FADER	NY BAYSIDE	257	53	15	0	0	16+	1	0	0	18	74 08/24/79
45	BOB	SCHWEITZER	NJ E. BRUNSWICK	252	76	7	0	0	11+	0	0	0	12	77 01/17/86
46	ROBERT	ROSS	ON LONDON	221	56	26	0	0	16	1	0	0	17	76 08/01/85
47	PAUL	MOUNT	NJ TEANECK	220	28	32	0	0	21+	1	0	0	23	79 12/03/85
48	BILL	NOLLMAN	CT NORWICH	204	31	31	0	0	23	0	0	0	23	81 03/12/85
49	RONALD	PURDUE	MN BYRON	188	3	95	0	0	20+	0	3	0	24	81 06/30/84
50	FRANK	WHEELER	PA ERIE	135	19	3	0	0	7	1	0	0	8	64 03/04/85
51	WILLIAM	HEPBURN	ON NIAGARA FALLS	144	51	35	0	0	18+	1	0	0	20	79 08/10/84
52	BOB	SCHWEITZER	NJ OLD BRIDGE	130	35	0	0	0	9+	0	0	0	10	82 01/17/86
53	BUS	MANCUSO	MD CHEVERLY	128	16	2	0	0	9+	0	0	0	7	70 08/22/84
54	LARRY	VAN HORN	FL ORANGE PARK	98	15	0	0	0	4	0	0	0	4	85 09/22/85
55	WILLIAM	HEPBURN	NT CORAL HARBOUR	56	5	55	0	0	5	0	0	0	13	84 08/10/84

=VERIFIED

COLUMN DEFINITIONS are as follows: Total=Total number of FM stations logged. (Freq. changes count as a station, call letter changes DO NOT count. Also count a station only once regardless if logged by different propagation modes.) 88-92=All stations logged from 88.0 to 91.99 Mhz. Es=Total number of stations logged via E-skip. MS=Total by meteor scatter. Au=Total via Aurora USA=Total number of states and the '+' = Washington, DC. CN=Number of Canadian provinces logged. MX=Number of Mexican states logged. FO=Number of foreign countries, but not Canada or Mexico. TPU=total number of political units=sum of USA CN MX and FO. YB=The year you began DXing

This month's version of FM Statistics features all FM Scoreboard entries that I have on record, back to 1977. The next version of the FM Scoreboard will include only 1985 & 1986 updates....so please send in your updates if you are not current with your statistics. Below is the latest States Stats standings. If you have any new FM Distance Records, or have some unusual FM Statistics that you want to share in this column, please write. Good luck this coming season in your FM DXing...73, Fred.

STATES STATS

USA*****USA*****

STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER
AL	54-TMc	46-JEb	HI	0-None	0-None	MA	89-RSt2	77-MBu	NH	35-JJe2	33-JPi	SD	28-FMc2	28-Pdy
AK	11-JJe3	0-None	ID	22-DBu	21-Pdy	MI	139-FMc	117-RSt	NY	163-FNo	138-DNi	TN	93-Jay	82-TMc
AZ	37-Pdy	29-FMc	IL	152-RSt	115-BE12	MN	145-JEb	127-JEb2	NC	67-Pdy	66-BE12	TX	241-Pdy	211-RSa
AR	65-Dd4	61-VEa	IN	150-RSt	112-Dbr	MS	64-TMc	36-FNo	ND	24-FMc2	23-FMc	UT	22-Pdy	20-DBu
CA	278-JJe2	107-Pdy	IA	92-JEb	69-BE12	MO	73-DBu	44-FNo	OH	186-RSt	177-FMc	VT	12-RSt2	12-MBu
CO	54-JJe2	49-Pdy	KS	77-DBu	43-FMc	MT	25-JPi	16-DBu	OK	95-DBu	40-FNo	VA	46-DBu	41-JEb
CT	49-MBu	41-AMi	KY	71-RSt	45-Pdy	NE	41-JJe2	28-Pdy	OR	31-JPi	18-FMc	WA	27-JJe2	30-FMc2
DE	11-SMe	10-DOe	LA	53-RSa	45-BE12	NV	17-DBu	15-FMc	PA	134-DNi	184-DOe	WV	33-FMc	29-RSt
FL	125-DBu	106-Pdy	NE	38-RSt2	14-JEb	NH	22-RSt2	15-MBu	RI	11-RSt2	10-MBu	WI	123-BE12	117-JEb
GA	63-JPi	61-Pdy	ND	45-GMa	43-DOe	NJ	60-JFe	55-RSc	SC	38-DBu	38-Pdy	WY	22-Pdy	15-JJe2
												DC	13-SMe	13-DNi

CANADA*****CANADA MEXICO*****MEXICO FOREIGN*****FOREIGN

PROV	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	STATE	# -DXER	# -DXER	CNTRY	# -DXER	# -DXER
AB	24-JEb2	19-JJe2	AGU	1-JPi	0-None	GT0	9-JPi	2-TMc	PUE	4-JPi	4-TMc	CUBA	2-MBu	1-KSi
BC	17-JJe2	7-JEb2	BCN	11-Pdy	10-FMc2	HGO	1-JPi	0-None	SIN	2-JJe2	0-None	BELIZ	2-Pdy	1-JPi
MB	15-FMc	10-MMc2	BCS	1-Pdy	0-None	JAL	12-TMc	10-Pdy	SLP	2-TMc	0-None	BERMU	2-FNo	2-DNi
NB	3-FMc	3-RSt	CAM	1-JPi	0-None	MEX	1-JPi	1-Pdy	SON	1-FMc	1-DBu	EL SA	1-Pdy	1-KSi
NF	9-FNo	8-DNi	CHI	6-JPi	6-FMc	MIC	3-JPi	1-Pdy	TAB	2-TMc	1-JPi	GUATE	5-Pdy	4-KSi
NS	8-SCh	6-DNi	COA	6-JPi1	4-Pdy	MOR	4-Pdy	3-JPi	TAM	5-Pdy	2-JEb	HONDU	2-KSi	1-Pdy
ON	81-DNi	60-SCh	DF	21-TMc	21-JPi	NL	14-Pdy	4-JEb	VCZ	9-JPi	5-TMc	JAMA1	3-JPi	1-TMc
PE	2-JFe	2-RSt	DUR	1-Pdy	0-None	OAX	1-JPi	1-Pdy	YUC	2-JPi	2-Pdy	PUERT	4-KSi	1-DNi
PQ	19-FNo	18-RSt2	GRO	5-Pdy	1-JPi							D. REP	1-KSi	0-None
SK	8-FMc	7-MMc2												
NMT	1-MMc2	1-JEb2												

KEY TO STATS DXER INITIALS/NAME-LOCATION

AMi	Alan Michalek	MA Springfield	FNo	Fred Nordquist	NY Clay	MBu	Mike Bugaj	CT Enfield
BE12	Bruce Elving	MN Duluth	Jay	Jim Ayers	TN Murfreesboro	Pdy	Pat Dyer	TX San Antonio
Dbr	Dave Brumfield	IN Muncie	JEb	John Ebeling	MN Bloomington	RSa	Rick Sanford	TX Burnett
DBu	Danny Buntin	OK Stillwater	JEb2	John Ebeling	MN Prossit	RSc	Bob Schweitzer	NJ E. Brunswick
DNi	David Nieman	NY Alton	JFe	Joseph Fela	NJ S. Plainfield	RSt	Ralph Strobel	IN Muncie
Dd4	David O'Dell	AR Little Rock	JJe2	John Jefferson	CA Pleasanton	RSt2	R. Steinberger	MA Hudson
DOe	Daniel Getting	PA Brookm	JJe3	John Jefferson	AK Anchorage	SCh	Saul Chernos	ON Burnt River
FMc	Fred McCormack	ND Des Lacs	JPi	Jim Pizzi	MN Lovington	SMe	Steve West	PA Havertown
FMc2	Fred McCormack	ND Fargo	JPi1	Jim Pizzi	CA Orcutt	TMc	Tim McVey	TN Bolivar
FMc	Frank Merrill	OH Toledo	JSm	Joseph Smith	NY Johnson City	VEa	Vernon Eaton	AR Denton
FMc2	Frank Merrill	MI Milan	KSi	Ken Simon	FL Lake Worth	WMe2	Wm Hepburn	NT Coral Harbor



FEEDBACK

MEMBER GREG HARDISON
RESPONDS TO JANUARY VUD;
ABC TALKRADIO'S DX SPECIAL
WAS NOT "ALL SHORTWAVE"

After the tremendous effort put forth by the club in promoting the Ray Briem DX Special of December 7, 1985; I was rather shocked to see the blatant disinformation placed on Page 2 of the January VUD, regarding that particular program. It's fairly obvious that the author of that paragraph either A) did not bother to actually listen to the show, or B) had no comprehension of what he or she was hearing.

The sentence I'm referring to reads thus: "If you caught the Ray Briem Show...once again we were treated to an all shortwave DX special." This is a false statement--nothing less. First of all, I'm appalled that the WTFDA chooses to completely discount the contributions of Dr. Bruce Elving to our show. Bruce was on the line for just over three hours; admittedly, we did not have enough time to devote sufficient coverage to any one aspect of DXing--but, the fact remains that Bruce received more calls, on an individual basis from listeners, than Stewart Mackenzie of the ASWLC--who was in studio for all 5 hours. As a producer, I felt certain this would be the case...and (in one segment) Bruce mentioned the WTFDA by name. This surely doesn't seem like "all shortwave" to me. In addition, that asinine phrase discounts other emphasis which was placed on mediumwave, longwave and satellite DXing. Again, regrettably, our time was limited. But you have to realize that the show was not designed strictly for the few thousand DXers in the country, exclusively. We cannot realistically expect to produce such a specialized program, without taking into account the perceptions and listening-needs of the tens of thousands of our regular (read: non-DXing) audience. It would have been completely unrealistic of you to expect us to devote any more time than we did, in reality, to specific discussions of FM/TV--or MW, or LW, or utes, etc., etc. The paragraph in question acknowledged the fact that DXing is generally ignored by the public--for this very reason, an emphasis on SW was used as a sort of "hook" for targeting said public. Just about any guy on the street will equate SW with his concept of what we know as DXing; a concentrated discussion of any one particular non-SW band would be too technically complex for most listeners--thus, the public learns nothing. Even with this in mind, I invited Bruce to participate with the purpose of drawing attention to DX pursuits in the VHF/UHF spectrum--your statements calling the show an "all-SW" affair are a slap in the face to both Bruce and to me.

We did relay some important info about FM DXing. Bruce even got briefly into his running SCA controversy, and, given the brief amount of time we had for the entire thing, I think we did a pretty good job of covering all aspects of DXing. True, we devoted a lot of time to SW--but to say that the show was "all SW" is just not true. The VUD reads, "but guys, if you would have given us a chance..."--why didn't we hear from any of the WTFDA Staff as callers?? Where were you that night?? Any of you would have had a golden opportunity to call in an deluge the program with plugs for the club--many others did just that for their respective organizations.

Personally, I have been a DXer since I can remember--and, having grown up in Georgia, I'm well aware of the DX available on the VHF/UHF bands. The "propagation modes more rare and different..." as stated in the January VUD blurb, were in fact covered by Bruce during his initial conversation with Ray.

In closing: I would have no argument with any assessment of the show, which theoretically would have stated that the show was weighted toward SW--indeed, that's the way it was designed--but not at the exclusion of other modes of DX. But to say that the show was "all shortwave" is terribly unfair--and, again, downright false. Strictly as a member, I think the club staff owes it to the membership to set the record straight.

--Greg Hardison
ABC Talkradio

TECHNICAL TOPIX: all about s-meters

It probably isn't too hard to figure out that S-meters indicate the strength of a signal presented to a tuner or receiver. But do they really give the user information that can improve local or DX reception? And what can a radio experimenter do with the cute little LED displays that change color with signal strength? Ideally, an S-meter installed in a tuner would be calibrated directly in units of signal amplitude (microvolts or dBf), but instead usually have some arbitrary scale 0 to 5, 0 to 10, or no scale at all. Who knows whether or not a scale reads linearly? In some portable radios, "s-meters" are labeled as "tuning indicators," and I've only seen one TV in my life with a S-meter. This article proposes, then to answer these pressing questions of our time, describe how s-meters and tuning indicators work, and even how to connect these devices into your tuner or radio.

In these days of advancing technology, more and more receiving equipment is embellished with LED bargraphs and color patches instead of "old-fashioned" meters, which may be a step backward from the DX'ers standpoint. As an observation, I looked at literature for 35 stereo tuners and receivers at random (all 1982-1985 models; no particular price range) and found the following kinds of indicators:

+ DIGITAL READOUT OF SIGNAL IN ACTUAL dBf (Sansui)	1
+ CALIBRATED S-METER (Tandburg, ReVox)	3
+ 5-SEGMENT LED BARGRAPH	16
+ 3-SEGMENT LED BARGRAPH	3
+ PATCH that CHANGES COLOR with signal level	6
+ NO DISPLAY AT ALL! (Pioneer, SAE, Akai, NAD)	4
+ ONE LED (Denon)	2

From this one sees the influence of marketing departments! No doubt the LED graphs are the most prominent because (1) they are inexpensive (cheap), and (2) LED's have a certain "hi-tech" look that sells what may be otherwise undistinguished equipment.

Needless to say a 3 or 5 LED display, or a silly patch that changes colors, or even the 0.5 x 0.75 inch edge meters in some portables simply do not have enough resolution for any scientific observation. We must remember that there's no reason--from the manufacturer's point of view--to provide stuff that the majority of consumers don't care about. The DX'er, however, who wants to experiment with antennas, preamps, traps, and other RF tomfoolery must have some sort of meter with which to gage the results of said experiments. Fortunately, we can make about any receiver "talk."

First off, let's pick up some radio operation so that the reader can see exactly what goes on in a tuner. It may not be obvious from a schematic of a TV or tuner where to hook up an S-meter, but an understanding of how the circuits work can make it so. There really is no mystery to things like AVC, AGC, AFC, and FCC (scratch that last one.), which are all involved in signals and tuning.

Even though we are VHF listeners, it is helpful to look at AM radio for a bit. Mathematically, commercial broadcasters use a method of AM which forms a signal given by

$$f_{AM}(t) = f(t) \cos \omega_c t + A \cos \omega_c t.$$

This represents amplitude modulation, where $f(t)$ is the music or sound to be transmitted, and ω_c is the carrier frequency (i.e. for WABC, ω_c is $2\pi \times 770\text{kHz}$). A is a constant term, the carrier amplitude, which is adjusted at the station along with per cent modulation to yield undistorted audio. To us the math is not important, but the math represents a handy means of wireless transmission for which cheap receivers can be built. As you well know, $f(t)$, the program, can be recovered from the AM signal with one diode!

The AM radio detector of Fig.1 is no doubt familiar to all, but there is a bonus. When $f_{AM}(t)$ is demodulated with a circuit like Fig. 1, one actually recovers $f(t) + A$, or, in other words, the music riding on a d.c. level. That d.c. level depends upon the strength of the signal applied to the input from the antenna. Thus, if we ignored the music, we would have a device that indicates relative signal level.

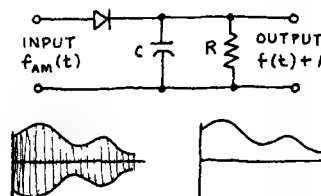


FIG.1 AM DETECTOR

With that in mind, let's look at FM. For your information, frequency modulation may be described by an equation similar to that for AM:

$$f_{FM}(t) = A \cos[\omega_c t + k \int f(\tau) d\tau]$$

where the symbols are the same as before, k is a modulation constant, and $f(\tau)$ is the program. To retrieve $f(\tau)$ from the FM signal tickling our antenna, two kinds of detectors are commonly used. One, the discriminator detector (or "Discriminator" for short) consists of a differentiator to remove the integral, followed by the simple AM envelope detector of Fig. 1. The discriminator requires a "Limiter" circuit ahead of it. The limiter reduces the effect of variations in the amplitude of the IF signal, which would be detected themselves and passed on to the audio.

More commonly, the Ratio Detector is used to demodulate the FM signal. The circuits of several ratio detectors appear in Fig. 3. In Figure 2, a simple R-L discriminator is illustrated for comparison. In Fig. 3(c) actual parts values listed are for a Radio Shack TM-102 AM/FM stereo tuner. A block diagram of a complete FM receiver appears in Fig. 4 which can be referred to to help locate these circuits in your tuner.

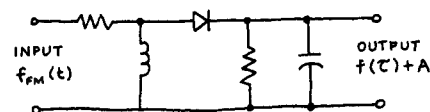


FIG. 2
Simple discriminator

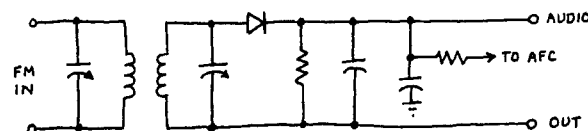


FIG. 3a
Single-Tuned discriminator

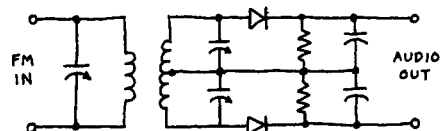


FIG. 3b
Triple-Tuned (Foster-Seely) discriminator

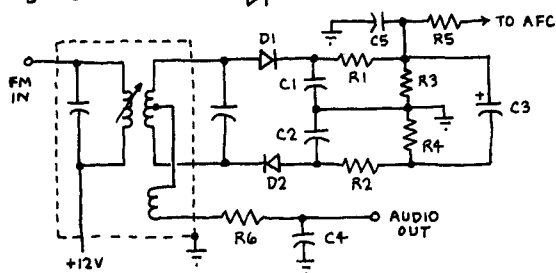


FIG. 3c
Practical Ratio detector
 $R1=R2=1000\ \Omega$
 $R3=R4=10K$
 $R6=100\ \Omega$
 $C1=C2=100\ \mu F$
 $C3=3.3\ \mu F$
 $C4=220\ \mu F$

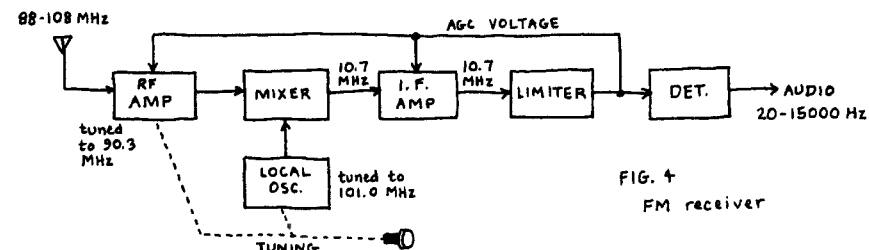
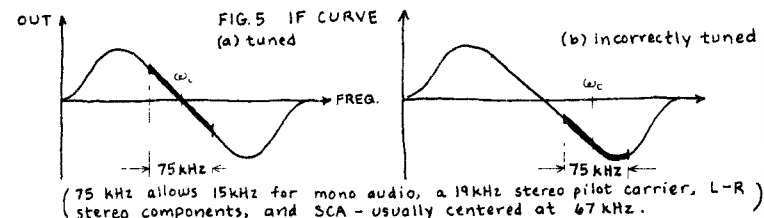


FIG. 4
FM receiver

Any information modulated by means of FM will cause the carrier frequency to vary. For example, a 1000 Hz audio tone broadcast over 90.3 MHz FM will vary the carrier from 90,301,000 to 90,299,000 Hz. In Fig. 3(c), then, the currents through diodes D1 and D2 vary when the IF frequency varies from its center at 10.7 MHz. Since those currents are unequal, a voltage develops across C4 which represents $f(\tau)$, the program. The voltage across C4 need only be amplified or fed into headphones. The d.c. voltage at C5 can be used for Automatic Frequency Control (AFC), which will be described later.

Now, the reader has been exposed to the detector, upon which the rest of our discussion is based. From the discriminator circuit, one can derive voltages for tuning meters, signal meters, AFC, and AGC. The circuits in Fig. 3 are relatively easy to build, reliable, and in widespread use in almost every FM receiver. If you have read this far, then we are ready to proceed to practical matters.

Casually speaking, one tunes an AM receiver for the loudest volume, to correctly tune in an AM station. An FM tuner, on the other hand, is tuned to deliver the least distortion. This is illustrated in Fig. 5, a diagram of the response of the detector.



In Fig. 5(a), the radio is tuned exactly at the center of the S-curve. If the maximum carrier frequency deviation of the FM signal is 75kHz (as is the case in the 88-108 MHz broadcast band), the carrier falls within the linear region of the curve. This implies that as the carrier frequency changes with the music, the output voltage of the detector changes linearly with it.

In Fig. 5(b), notice how the improperly tuned radio allows the carrier to deviate into the non-linear part of the detector's response. Audible distortion results because the changing carrier frequency does not cause a corresponding change in output.

So...the operation of the FM detector requires exact center tuning for best audio reproduction, stereo separation, etc. To assist the operator in this quest, some manufacturers have included center-tune meters in their products. Not to be confused with S-meters, the tuning meter has a positive, zero, and negative region on its scale, and the receiver is tuned so that the needle rests at the zero, or center.

It is a simple matter to pick off a d.c. voltage at the detector and use it to drive a center-tune meter. In Fig. 3, R5 and C5 make this d.c. voltage (C5 shunts the a.c. component to ground) available to operate a tuning meter, AFC, or both. When the receiver is correctly tuned, the d.c. across C5 is zero. If the frequency is too high, there is a positive d.c. level. If low, there is a negative d.c. level. Used for AFC, this voltage is used to slightly re-tune the local oscillator in the direction that yields zero d.c. offset. Thus, the AFC voltage corrects slight mistuning, and may even tend to "pull" the receiver to a stronger station.

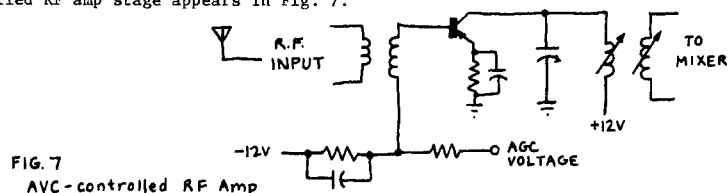
Sometimes AFC switches are provided which enable the user to disengage the AFC. When DX'ing a weaker station next to a strong, local station, it is to your advantage to disengage the AFC so that the tuner will stay on the weaker channel. Modern FM receivers seldom have these switches because today's local oscillators do not tend to drift as much as did the tube designs. AFC or PLL action is still desirable and used, but in very few cases will it disturb the selectivity of a receiver.

From an experimenter's standpoint, a high-impedance VTVM or digital VM may be used to probe the AFC voltage without upsetting the operation of the tuner. If there is an AFC switch, simply probe there. Otherwise, look for an electrolytic capacitor in the detector circuit and probe around there, with the (-) lead connected to some common or ground point in the tuner. You should see a d.c. voltage swing from a negative value, to zero (when the station sounds like it is tuned in), and up to a positive value as you tune across the station. A center-tune meter, or even a dual-color LED can be hooked up as a permanent feature of the radio. (More on that later.)

Our discussion on S-meters--meters which give some relative indication of how strongly a signal is coming into the tuner--will involve another important feature of radio receivers: Automatic Gain Control (AGC). AGC is used interchangeably with AVC. Automatic Volume Control describes the effect of the AGC circuit.

Jumping back to the AM detector, we found that the d.c. level appearing at the output terminals varied with incoming signal strength. Imagine, now, listening to a broadcast whose signal is constantly fading in and out. On a radio without AVC, you would have to constantly adjust the volume control, an irritating inconvenience. Tuning across the dial without AGC would produce barely-audible sound from the weak stations and overload and distortion from the strong ones. The AGC system takes a signal-proportional voltage from either the IF or detector stage and uses it to vary the gain of the RF and IF amplifiers. It operates as a feedback system. Thus, the RF and IF stages operate at maximum gain as needed for the weaker stations, and AGC voltage reduces the gain on strong signals. The effect at the speaker is a relatively constant volume for all incoming signals.

AGC circuits are specified by measurable factors such as attack time, decay time, dynamic range, polarity, etc. The attack and decay times are selected to prevent a loud snap in the speaker when the AGC responds to a strong signal. Sometimes "AVC action" switches are provided on receivers where the nature of the signal to be received might require "faster" or "slower" action. As an example, a practical AVC-controlled RF amp stage appears in Fig. 7.



Notice that as RF signal from the antenna increases, the AGC voltage picked off from the limiter and applied to the AGC terminal increases. This adds to the -12V and decreases the transistor's bias voltage. This in turn causes the gain to decrease.

The AGC then is a convenient means of providing the best receiver performance under varying signal conditions. Now, we purpose to use that d.c. voltage for our own plans: S-meters. While the AGC voltage is NOT EQUAL to the signal entering the antenna terminals, it is PROPORTIONAL, which is all that matters since it is easy to build circuits to scale things. In some cases the AGC voltage will be inversely proportional, but still quite useful for our purposes.

Finding the AGC voltage in a tuner is the only thing that might require a little effort. Fortunately in television receivers one always has a place to start: the tuner. In any TV with a separate tuner (meaning one can see a physically distinct box containing the tuning components or switches, and with a shaft sticking out of it) there must be connections to that unit: antenna input, signal output (by coax cable), power, and AGC. (TV tuners normally have a television's first RF stage built-in for noise immunity and, hence, the need for an external AGC voltage.) Older TV's with mechanical tuners are especially easy to work with. In many cases the power (often labeled "B+") and AGC terminals are labeled.

To observe the AGC voltage requires a voltmeter with a very high input impedance. Most analog VOM's have a rather low (by today's standards) impedance which will load the AGC circuit excessively and upset its operation. Thus, a VTVM or digital VOM is recommended. With the negative lead connected to ground, you will measure at the AGC terminal a small (less than 5V) d.c. voltage which will change as you rotate the antenna or otherwise cause the signal at the antenna terminals to change. If the AGC terminal is not labeled, it can easily be found by the process of elimination. (And do be careful inside a live TV set, please!) Be aware the "B+" voltage on tube-style TV's and receivers may be a hundred volts or more.

If you can set your meter where it can be seen from the front of your TV, it makes an interesting experiment to see how the picture quality changes with signal level. Also, you may observe that if you rotate the antenna for best picture, you may have to rotate it slightly more for maximum signal reading without noticing any further change in picture quality.

There is no reason the meter thus connected cannot be left there permanently. If the voltage decreases with increasing signal, reverse the leads. If you choose to buy a small panel meter, you will need to whip up a small matching circuit to drive it, as it probably cannot be connected directly to the AGC terminal. This will be described in the next part of this article.

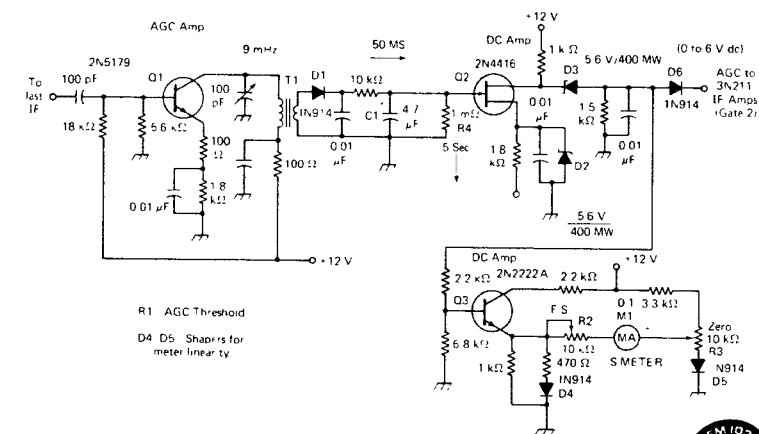
Radios may seem to conceal the AGC better, as all those little parts are soldered to one board and there are usually no labels telling where everything is. In this case the most logical way to go about this whole business is to carefully and thoughtfully probe around in the area of the discriminator and IF amp until the desired voltage is found. Match your radio's schematic to the detectors shown in Fig. 3. If you have no schematic, you can still look and find the circuits of Fig. 3 similarly reproduced in your radio. Start by locating the pair of diodes which make up the detector (don't confuse with the power supply diodes, which will not be physically located anywhere near the area you should be looking anyway). The transformers in Fig. 3 are encased in square, chromed metal cans with a screw-adjustment hole on top. Especially notice any test points or unconnected terminals in the area as they often provide exactly the voltage we are looking for. (Manufacturers sometimes will design in those points for testing and servicing, and may even use them to hook up a S-meter on a model more expensive than your own. Don't overlook this.) Your voltage may increase or decrease but whatever it does it must do so with changing signal at the antenna terminals. If you're looking for AFC voltage, it must change with tuning, but not with signal strength.

Suppose your tuner already has some sort of signal-indicating device which you want to improve. It, of course, makes your job that much easier, as you already have the connection located. Just trace the wires back from the LED or whatever to the board.

The next step in either case is to either (1) run wires out to a terminal strip or jack on the receiver's case, or (2) build in the meter. The former option allows you to connect your voltmeter at those times when you need to see an S-meter, and is probably less traumatic to the tuner. To connect a panel meter into the AGC or AFC circuit will require some sort of simple transistor circuit to drive the meter and protect the existing circuitry from being unbalanced by the low resistance of a meter. This will be described next time.

Next month this article will continue with information on designing the meter "interface" circuit, and what can be expected from the S-meter.

73's Tim McVey Route 3, Box 568, Bolivar, TN 38008



SOUTHERN FM DX

ERIC BUENEMAN
c/o KCFV-89.5 FM
3400 FERNALL RD.
FERGUSON, MO 63135

Report to this column if you are from: AL, AZ, AR, CA, CO, DC, DE, FL, GA, KS, KY, LA, MD, MO, NC, NV, NH, OK, SC, TN, TX, UT, VA and WV

The chatter will wait until the end of the column.

PAT DYER (WA5IYX), 5315 Silvertip Dr., San Antonio, TX 78228

Equipment: Realistic TM-1001 tuner into Allied 426 with an Archer six-element beam and rotor at 20' AG (please note also NABL).

Pat wraps up 1985 with this awesome report, all times CST.

NOVEMBER 1985

5 Es 1713 XHFE 89.9 BCN 1010
1716 XHBA 104.1 BCN 1010
1719 XHMP 92.3 BCN 1010
tr 1729 KNFM 92.3 TX 280
7 Es 1713 WPNE 89.3 WI 1190
WERN 88.7 WI 1065
1720 fade-outs
1853 WCAL 89.3 MN 1080
1857 KQRS 92.5 MN 1110
1858 KSTP 94.5 MN 1110
1859 KBEM 88.5 MN 1110
1902 KTIS 98.5 MN 1110
1903 KTCZ 97.1 MN 1110
1908 fade-outs
1958 KQDB 92.5 CA 1340
2001 KUSD 89.7 SD 920
2002 KELO 92.5 SD 975
2004 KBHE 89.3 SD 1040
KESD 88.3 SD 1020
2006 KFAC 92.3 CA 1190
2009 KLON 88.1 CA 1180
2011 KLOS 95.5 CA 1190
KMET 94.7 CA 1190
2012 KMGH 105.9 CA 1190
KJOI 98.7 CA 1190
2015 KFOX 95.5 CA 1195
2024 KPBS 89.5 CA 1120
2033 KILA 90.5 NV 1050
KCEP 88.1 NV 1050
2120 KPCC 89.3 CA 1185
2121 KZLA 93.9 CA 1190
2138 fade-outs (spotty 2020-2138)
8 Es 1930 KSPC 88.7 CA 1160
1931 KPCC 89.3 CA 1185
1937 KXLU 88.9 CA 1190
1938 KFAC 92.3 CA 1190
1939 KJOI 98.7 CA 1190
1940 KHTZ 97.1 CA 1190
KLOS 95.5 CA 1190
KLON 88.1 CA 1180
KUSC 91.5 CA 1190
1941 KFOX 95.5 CA 1195
1943 KMET 94.7 CA 1190
1947 KNOB 97.9 CA 1180
1949 KSBK 88.5 CA 1150
1950 KCHV 97.7 CA 1070
1951 KIFM 98.1 CA 1120
KGB 101.5 CA 1120
KFMB 100.7 CA 1120

(contd.)

8 Es 1952 KFSB 94.1 CA 1120
1955 KSTP 91.1 BCN 1100
1957 KSDS 88.3 CA 1120
1959 KFSB 89.5 CA 1120
2003 KFSB 92.5 BCN 1100
2007 fade-outs
12 tr 2117 WCKA 92.3 LA 495
2128 WCKF 89.3 LA 450
2219 WGGZ 98.1 LA 450
2234 KJEF 92.7 LA 360
2249 ABIM 94.9 NM 440
(see comment #1)
2252 ASMB 94.5 LA 395
2253 KTOY 99.9 LA 395
2334 KMTA 98.7 NM 385
2335 KBAF 93.3 TX 280
2336 KUFO 97.9 TX 275
2338 KJIF 96.9 TX 275
13 tr 0146 WYMK 101.5 LA 450
0208 WYNO 89.9 LA 510
0728 WTYX 94.7 MS 525
0729 WMAU 88.9 MS 470
16 tr 0045 KDMT 94.5 TX 300
28 tr 2351 KJFM 92.3 TX 280
29 tr 2020 KJFM 92.3 TX 280
2043 KJIF 96.9 TX 275
2106 KKKK 99.1 TX 275

DECEMBER 1985

12 ms 0844:40 WKKK 92.5 KY 865
tr 1030 KDMT 94.5 TX 300
ms 2044:20 WKKK 92.5 KY 865
13 ms 0645:50 KJZT 104.1 IA 880
0647:57 KLSK 104.1 NM 600
0703:15 KJJO 104.1 MN 1100
0845:40 WESC 92.5 SC 1010
Es 1427 TG-- 88.1 Guat. 1120
TGRT 88.8 Guat. 1120
1430-1447 lull soon to fade-out
ms 2159 WKKK 104.1 IL 815
15 Es 2114 KSTP 94.5 MN 1110
20 Es 1123 WYSU 88.5 OH 1275
1126 WXXC 96.5 WV 1090
1127 WKEN 98.9 OH 1275
1130 WTOF 98.1 OH 1235
1131 WJQC 92.3 OH 1260
1133 WSKS 96.5 OH 1045
WHBC 94.1 OH 1235
1137 WNCI 97.9 OH 1135

PAT DYER (Continued)

DECEMBER 1985 (Contd.)

20 Es 1138 WYUD 99.9 OH 1085
1143 WNGO 101.3 OH 1200
1144 WGCC 98.5 OH 1250
1145 WDBN 94.9 OH 1230
WDMT 107.9 OH 1250
1148 WYNO 106.1 OH 1180
1151 WSNY 94.7 OH 1130
1154 WJJI 105.7 OH 1250
1200 WPTW 95.7 OH 1085
1203 WVCP 88.5 TN 845
1207 WLAF 94.5 KY 995
20 Es 1209 WDCI 89.9 KY 960
1211 WYUB 88.5 OH 1045
WYKU 88.9 KY 995
WKSU 89.7 OH 1255
WJGC 95.1 KY 890
1222 WYUU 98.1 KY 995
1235 fade-outs
24 Es 1525 TGRT 88.8 Guat. 1120
1528 TG-- 88.1 Guat. 1120

Comment #1: Antenna was pointed east when KBIM-94.9 was caught.

Comment #2: "I got a few things with the quadratid meteor shower, but not enough time to review the tapes-so they'll be in the next report".

Comment #3: "A lot of early November Es, but the big day so far (for MUF) this winter season has to have been December 20".

Comment #4: "Geminid meteors very productive, as the in-state trop conditions were down, letting me sit on 92.5 without too much of Jallas (KAFM) and 104.1 without much of Houston (KXSE)".

Comment #5: "Good trop on November 12-13 seemed to last only about twelve hours. Don't often have it going well into New Mexico, Louisiana and Mississippi at the same time." 73, rat.

(That's what I call "writing" in a Texas drawl, hi!-eb)

ERIC BUENEMAN, c/o KCFV 89.5 FM, 3400 FERNALL RD., FERGUSON, MO 63135

Not much in the way of DX this time, the usual Springfield/Decatur, IL, Cape Girardeau, MO and southern IL FMs. One day of note was January 16-17, 1986 when WIBI-91.1 and WSMI-106.1 were coming in with signals equivalent to those of St. Louis stations. Semi-local KITJ was considerably weaker due to adjacent-channel WNNB. My Archer Deluxe indoor antenna was retired on December 21 after two and one-half years of service. In that time, I heard over 70 stations in 13 states and one Canadian province. Right now I'm on a cheap rabbit ears until I can afford a new antenna.

CHATTER:

DEADLINE DEPT.: Deadlines will always be the last day of each month.

KCWA NOW ON THE AIR: KCWA 89.9 MHz Arnold, MO is now on the air. Haven't heard them due to WLGA.

KCFV CHANGES PRODUCTION DIRECTORS: Jerry Prasha, a nighttime DJ at KCFV, has taken over as production and continuity director, succeeding Brian Crader, who resigned because of professional commitments at WLL-92.3 St. Louis. Of course, Jerry is on from 2100 to 2400 CST Mondays and Wednesdays.

REMINDER: If you hear KCFV via trop or Es, send the report to SPM and I'll have GM Ted Paas send you your QSL. Request line numbers are (314) 595-4472 or (314) 524-8311.

SOAPBOX DEPT.: This anti-AM campaign must stop. I am also an AM broadcast DXer, and I believe that AM CAN COMPLETE WITH FM. AM Stereo, simulcasting and other technical advancements will save AM radio toward the end of the 1980s. FM will still be popular, but AM will heat up in the next four years. There's already a move to AM-FM simulcasting for several stations, especially Top 40s like WJZZ Detroit and WNNK Cincinnati. Radio, it's red hot, but FM is hot and AM is getting much hotter.

Good DX for now, EB 29



QSL CORNER

THOMAS J. YINGLING, JR.
221 PINWOOD ROAD, BALTIMORE, MD 21222-2345
PHONE # 301-2828-5649

FM QSL's

- FL WFLA 93.3 Tampa, 301 Jackson St., zip-33601. Reply with a white card, signed by Brian W. Johnston, Jr., Var. Ltr. Orlando, % P. O. Box 8105, Winter Haven, FL 32790.
WBW 105.1 Letter, 7 bumper-stickers from Lohand, % P. O. Box 1031, Cobourg, % P. O. Box 1031, Fort Lape, ON L2A 4B5. QSL Card in 2 weeks from Martin Fletcher. Pkcs Booneville, MO 6302, zip 63029. Nine letter on f/up report from F. J. Bonds, Pres. & Mgr., Cooper
PA WJAL 10.1 Philadelphia, City Ave. & Monument Rd., zip-19101. Nine letter on f/up report from Vincent F. A. Benedict, VP/GM enclosing a 7/8" x 1 1/2" photo of female DJ I heard. Cooper
CT WCNI 91.1 New London, % Box 1333, Connecticut College, zip-06220. Handwritten letter from Peter (somebody), PD. Cooper
ME WBGW 97.1 Bangor, 35 Hildreth St., zip-04401. Brief letter on f/up try from George Hale, PD. Cooper
PA WFLN 95.7 Philadelphia, 8200 Ridge Ave., zip-19128. Coverage-map & verie on biz card of Thomas D. Moyer, CE. Cooper
NJ WFXX 101.5 Trenton, Box 5698, zip-08638. Letter & photo packet from Terry Watts, VP of Operations, on f/up. Cooper
PA WVIA 89.9 Scranton, % Public Broadcasting Center, Pittston, PA 18640. Letter, programming guide, coverage-map & other goodies from Thomas J. McHugh, Dir. of Programming-Cooper
NJ WNBR 100.7 Wildwood, 3010 NJ Ave., zip-08260. Coverage-map & ball-point pen received, BUT NO LETTER! Cooper
NJ WSOU 89.5 South Orange, Seton Hall University, 400 S. Orange Ave., zip-07079. Friendly 2-page letter from Michael A. Collazo, GM who says that I hold therecord for furthest report received by WSOU! Cooper
IA KXJX 103.3 Peella, Box 45, zip-50219. Letter from Mark Anthony McVey (any relation to Tim?) Elving
MN KBJJ 103.7 Bemidji, Box 1070, zip-56601. Letter from Curt Peterson saying I hold record for the greatest reception distance & invited me to drop in for a tour. Elving
KLCZ 96.1 Crookston, Box 665, zip-56716. Verie came in envelope for KDEZ. However station never operated as KDEZ, & signed by David Walter. Elving
F205AX 89.1 Hibbing-Chisholm, % FDNW, Duluth, MN 55802. Letter from Paul Harkness, Manager at parent station. Elving
KDOM 94.3 Windom, Box 218, zip-56101. Letter from Rich Biever, GM says "they has numerous reports from MT & WY for FDOM-AM, but I believe your report on FDOM-FM is the most unique" Elving
SD KUSD 101.5 Gregory, Box 101, zip-57533. Doug Williamson, sent letter & keychain. "Adolph farthest reporting point or reception." Elving
KOPN 107.3 Mitchell, Box 921, zip-57301. Joseph P. Shields, Pres. & GM who mentioned heard in AZ once. Elving
KUSD 90.9 Pierpont-Aberdeen % KUSD-FM, Vermillion, SD 57069. Letter from Gregory W. Schnirring, Radio Manager, "To my knowledge, your reception is by far the most distant point from which reception of KUSD has been reported" Elving

Reporters this all FM-QSL's month are Larry Van Horn of Orange Park, FL; Robert G. Ross of London, ONT; Ernest R. Cooper, of Provincetown, MA & Bruce F. Elvings now of Esbo, MN. Not a bad month for reports with one FM translator reported. In reporting stations for which please give the information the same way I type up this column. This would make it typing easier & faster, also give the station channel or frequency so I don't have to look them up like I had to this month. Thanks alot, and just keep on reporting.

73's Tom



COME TO THE

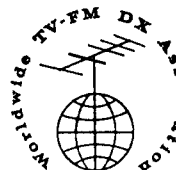
1986

W.T.F.D.A. CONVENTION

JAMESTOWN,

NEW YORK

AUGUST 1, 2, 3



Don't Miss It!

YOU ARE INVITED TO THE CLUB'S 1986 SUMMER MEETING!!!
JOIN YOUR FELLOW WTFDA TV, FM, & PSB DX ENTHUSIASTS THIS SUMMER FOR A WEEKEND GATHERING IN THE SCENIC HILLS OF WESTERN NEW YORK STATE. MANY OF THOSE WHO ATTENDED THE 1984 CLUB CONVENTION AT THIS LOCATION RATE THIS AS THE BEST CLUB CONVENTION SITE EVER!!!

YOUR 1986 CONVENTION HOST IS MICHAEL LAPINSKI, WHO CAREFULLY PICKED THIS 41-ACRE PROPERTY AS A GREAT DXING LOCATION. YOU'LL SEE WHY...TV AND FM DX SYSTEMS WILL BE IN OPERATION DURING THE CONVENTION ACTIVITIES. 300 TO 400 MILE TROPOSCATTER ON FM AND TV IS COMMON THERE DURING "NORMAL" CONDITIONS AT THIS TIME OF THE YEAR!!!

BE WATCHING THE QUD FOR COMPLETE DETAILS OF THE BUSY PROGRAM BEING PLANNED. THERE WILL BE THE USUAL DX/GAB SESSIONS, PLUS TENTATIVE TOURS OF AREA BROADCASTING FACILITIES.

IT'S ALMOST SPRING...TIME TO START MAKING SUMMER TRAVEL PLANS. WE'RE HOPING TO MEET YOU AT THE 1986 WTFDA CONVENTION!!!

NORTHERN FM-DX

Carl Chernus
P.O. Box 292
Paris, Ontario
N3L 3J2

MARCH 1986 (519)442-4456 (work) or (519)776-1201 (home), ANYTIME

ILLINOIS REPORTS HERE! So does AK CT ID IN IA KS ME MA MI MN MO MT NH NJ NY ND OH OR PA RI SD UT VT WA WI WY CANADA, eh! and non-USA entities such as Qatar. ARKANSAS DOES NOT REPORT TO THIS COLUMN!
BANDSCANS begin to trickle in. Remember the rules: report what you hear in a given six hours. FM ATLAS-sized entries will result in one editor found dangling by his necktie from a yag!
Please type if possible, so that I can use as-is. Or write neatly.
This past winter has been dead re DX, at least as of Jan 31. Some TV Es, minimal Tropo.
KEN ONYSCHUK...I sent your info to "M NEWS" BRUCE ELVING, so check his column for your contrib. Glad to hear from you!

SCOTT HOOD - Dean Jr. College - Box 971 - Franklin PA 02038-1994 EST

SEPT 1985 FROM FRANKLIN MA

26 Tr
0310 WUHQ 104.7 MD Ocean City "2-Q-105" 330
NOV 1985
1 Tr
0050 WUSL 98.9 PA Philadelphia 250
7 Tr
1805 WUSL 98.9 PA Philadelphia 250
14 Tr
0820,1205 CT in elevated strength, NYC in weak
1205 WUSL 98.9 too weak to ID (Scott, I'll bet you get 'em more often than people in downtown Philly!-saul)
18 Tr
1950 WUSL 98.9 PA Philadelphia 250
19 Tr
0820 CT in Stereo, WALK \$, NYC weak-semi
0825 WUSL 98.9 PA (HELP-saul)
2215 NYC in & out weak, warm nite with patchy to dense fog expected, but so far neither fog nor serious DX; same at 2340 check
21 Tr
0830 WUSL 98.9 PA Philadelphiaaaaah! 250

COMMENTS: Yup, the airwaves have definitely gone into hibernation for the winter! One thing I find unusual...when WERI 103.7 is off, WKNE-NH always there, tho WERI very close. (Though when I lived in Rindge, 25 mi. S.E. of Keene, I could always get ERI in \$). WKNE caught me off-guard, though I could only confirm it with the 5-band. That radio only comes in handy at "dead times" as the overload (or whatever) makes it very hard to distinguish real DX from overload. Another problem is the AFC. I can barely get within 2-3 channels of a local. When ex not dead, the "boombox" is by far the best. Hopefully I'll move up into the McKintosh/Carver league!
Well, packing my bags and going to HAWAII (HA-abbrev) for Xmas. See what I can get there, Es could be interesting. (Lots of ocean to pick up!-saul; if you get WUSL there let us know, hi! In the meantime, I suspect it is not unusual at least in Franklin. You could probably get it any night if you waited for a fade-in-saul) (Also, report HA dx here-s,again)

- NOTES RE DX QTHs:
- (1) FRANKLIN approx. 43 mi. SSW of Beverly.
 - (2) All new loggings NEW if logged 1st time in either location.
 - (3) Franklin logs not considered NEW if previously logged in Beverly; BUT Beverly logs ARE considered NEW if already logged in Franklin; though stats kept are separate.
 - (4) all distances measured via local, regional, or national roadmaps.
 - (5) Unless otherwise noted, distances are measured from location logged to city of license.
 - (6) Mileages rounded: -within New England (incl. E'tern NY for Franklin), to nearest mile.
-New England-420 miles...nearest 5 miles.
-420-700 mi. ... 10 miles. } (Ed: see note to left)
-700 plus... 25 miles.

(Scott, for your own use, the mileages are okay, but do not use these standards for the STATS column or club records-saul) (How do others do 'his-sc?')

NOV 22 Tr Pre-Kate=astrophic (non-dx hurricane)
0005 98.9 PA Philly 250
0105 WAWZ 99.1 NJ Zarephath 195
0115 WCAU 98.1 PA Philadelphia 250
27 Tr FROM BEVERLY MA Inclement wx
1935 WALK 97.5 NY Patchogue 170
airwaves from Augusta ME to CT unstable.
Remember this is the place where NYC is considered real dx.
30 Tr
1330 CT in & out all afternoon & night
DEC 1985
1 Tr pre-storm
0950 CT as above
1355 WUJR 98.1 VT Rutland 129
1400 WUUT 97.1 VT Rutland 129
BACK IN FRANKLIN, SAME DAY
1610 CT about normal, NYC in & out, Rutland pr
1635 WUSL 98.9 PA Philadelphia 250
4 Tr
0905 CT elevated reception
2005 WUHQ 103.7 NJ Atlantic City (WERI off, under WKNE) 250
9 Tr (WCRB off; with "5-Band radio"
0120 WUUT 102.5 NY Rome ac (r-saul)"U-102" 220
13 Tr 0950 CT elevated strength.

ERIC FADER 23-35 Bell Blvd. - Bayside NY 11360

Here's the latest "pirate report", in lieu of a DX report since I haven't had any DX... (Eric, thanks for the tape. I'm omitting some details for several reasons. Pirates really aren't DX, though they can be and DXers should be aware of them. For that reason I'm preparing a guide A-la-FM Atlas, to help DXers find them during Es, Tr... but details will be left out in this column about pirates. Only the basic loggings will get in; anything else cannot be - such as specific location, operator identity or speculation of such. The FCC reads DX bulletins looking for info, that has been proven. As a listener myself, I enjoy tuning in and speculating in private who & where they really are. I don't want myself or this club/column becoming part of an FCC investigation. Eric, I'm sending you a more detailed package on pirates, let me know if you don't (or do) get it. Here are Eric's pirate logs:

WFUN: 91.9 NY New York City area Dec 7-85 0130-0230.

WHOT: 91.5 not on lately.

NINE-FM: 91.9 NYC area heard 1985: Dec 28; 1986: Jan 5 0215-0245, Jan 6 2235 to past 0100 7th, Jan 8 2155- past 2300, Jan 14 2300. On Jan 8, "Joe" from WFPR pirate called to say he runs 15 watts at 55'AGL. I've never heard WFPR but think they're 91.9 too.

Others supposedly on in area: WAXY, WBKE, and an unnamed one run by guy named Tony. Anyone interested in writing to Edwin Armstrong of Stereo Nine FM can write to: P.O. Box 73, Staten Island NY 10301-0073. (As far as I know, not his real name and he uses it on air-sc).

DAVE NIEMAN - AKRON NY - 14001-9529 Carver TX-11 'tuner w/ \$-Probe-9 at 251/815'ASL.

NOV 1985

5 Es
1759 KESD 88.3 SD Brookings \$ 885
13 CW
0950 WGCC 90.7 NY Batavia r\$ (newto air)18
19 Tr
0045 WRSU 88.7 NJ New Brunswick r\$ 275
(WBFC off, CJOM-ON, WUUC-OH, CBOF-PQ all in)

COMMENTS: There has been quite a lot of E-skip on TV channels 2 & 3 lately.

Nothing on FM since Nov. 5. After reading the comments in the VUD re the 1985 Es season, I see the rest of you didn't think it was a good one. Well here's a brief run-down on what happened in Western NY. The season started FEB 5 w/ Es to FL...no new loggings. It ended NOV 5. 22 openings and 44 new loggings. JULY 8 the best day - the skip began 1209 EST and ended at 2030 with a 2 hour break in between. 12 new loggings and at least double that in relogs. 1985 may not have been the best Es year ever but it made the top five here. dave.

LEE ANTHONY - ERIE... did you get my reply to your letter? If not write back. I hope I was able to provide satisfactory answers to your questions. If not, try the technical column-s.

That's it, lots of inclement wx and minor Tr to 250 miles using the car radio, but nothing worth noting. Remember, May is skip-time. Is your equipment ready? 73s- Saul.

Worldwide TV-FM DX Association

from February 9 Buffalo News STORM DISRUPTS MAGNETIC FIELD, COMMUNICATIONS

Boulder, Colo. (AP) — One of the strongest geomagnetic storms since 1976 disrupted communications across much of the northern United States on Saturday, the National Oceanic and Atmospheric Administration said.

The disruption of the Earth's normal magnetic field meant problems for satellites, radios and aircraft, but also meant a "northern lights" display much farther south than usual, a spokesman at the administration's Space Environment Services Center said.

The spokesman, Bill Brennan, said this week's storms — the worst of which started at mid-afternoon Saturday and was expected to last 24 hours — were linked to a series of powerful solar flares this week.

While such a phenomenon can also mean difficulties with power distribution and phone lines, engineers monitoring such systems can make adjustments to deal with the problems, Brennan said.

The aurora borealis from Saturday's storm was expected to be overhead in the latitude that encompasses both New York and Chicago.

In fact, the storm's intensity meant that "if the skies are clear, you will be able to see an aurora from almost anywhere in the United States," Brennan said.

C.C.I. [UNIDENTIFIED DX]

Robert Grant, KOREN
575 Bishop
Detroit, MI 48224.
March, 1986.

March, 1986.

CCI- unidentified DX.

Michael Parks, cont.
1985: Tue 2 Jul Es ch 2 1520 CDT-- "People's Court" then "Alice" at 1530. (PTA: S,SE.)
" " " " ch 3 1529 CDT-- "The Incredible Hulk" (PTA: S,SE.)
" " " " ch 6 1535 CDT-- "Love Connection" (PTA: " ")
" " " " ch 6 1535 CDT-- "Divorce Court" (susp. either this or above was WLSU.)
" " " " ch 2 1603 CDT-- "M*A*S*H" (PTA: S,SE.)
Mon 8 Jul Es ch 2 2234 CDT-- ad mentioned cities of Layton, Riverdale, and Logan.
(Layton and Logan are both in the Salt Lake City area- KUTV-TV)
Sun 28 Jul Tr ch 6 0015 CDT-- "Solid Gold" (PTA: NE,KS,OK. not WGT.)
Thu 1 Aug Es ch 2 0142 CDT-- "Hawaii Five-O" (PTA: Canada.)
Sun 11 Aug Tr ch 6 2230 CDT-- "At the Movies" (PTA: S)
Sun 20 Oct MS ch 2 0327 CDT-- "CNN Headline News"
" " " " ch 4 0327 CDT-- "CNN Headline News"

Robert J. Williams, 312 Shoshone St. E., Apt. B-8, Twin Falls, ID 83301.
1985: Sun 19 May Es ch 3 2206 MDT-- "Star Trek" (PTA: Central US.)
Sat 25 May Es ch 3 2000 MDT-- "TURN TO 3" logo. (PTA: KS,NE,MO,IA.) (see drawing 2)
" " " " ch 3 2137 MDT-- movie- "The Longest Day" (PTA: Central US. not KYTV, KJLO.)
" " " " ch 2 2147 MDT-- "Solid Gold" (PTA: Central US.)
Sat 1 Jun Es ch 2 1948 MDT-- Tornado watch (or warning) symbol supered in upper left.
(PTA: TX.)
Fri 14 Jun Es ch 3 1200 MDT-- begin movie "Powder River" (PTA: TX,LA,NM,AZ,KS,OK,NE,SD,CO.)
" " " " ch 2 1530 MDT-- ads- "A-1 Mobile Homes", "Rogers Volkswagen" (PTA: " " " " " ")
Thu 20 Jun Es ch 2 1200 MDT-- end- "Guess What" (PTA: Canada., suspect CKTV.)
(the program name seems familiar, but I think it is CBC. -RG)
Sun 23 Jun Es ch 3 2117 MDT-- news with Karen Mayry. (PTA: Central US.)
Mon 24 Jun Es ch 2 1431 MDT-- begin "Welcome Back Kotter" (PTA: SW. KVBC-3 (NW) in.)
Tue 2 Jul Es ch 3 1152 MDT-- "Muppet-type" puppets in western clothing, followed at 1153
by a cartoon with Royal Canadian Mounted Police. (Dudley DoRight?? -RG)
(PTA: Canada, suspect CKX, CKOS, CJFB or CKBI. CBWYT-2 seen at 1130.)
" " " " ch 2 1202 MDT-- begin "Flintstones" (PTA: Canada, suspect CKTV.)
" " " " ch 2 2118 MDT-- CDT-zone station with a US map and "10PM Super Radar"
supered at bottom of screen. (KLNE-3 seen at 1952.)
" " " " ch 3 2131 MDT-- begin "Magnum, P.I." (same PTA.)
Mon 8 Jul Es ch 2 1840 MDT-- mention "Reliance" and "College of Business" (PTA: AB,SK,MB,
ND,WY,MT.) (There is a Reliance in SD. but not near any ch2-
"Entertainment Tonight". (same PTA) (Bob, when you said that
"Entertainment Tonight" is on ABC in USA you were wrong. "E.T." is a syndicated program,
it is carried by any station that buys it, including some ABC affiliates and others. -RG)
Mon 8 Jul Es ch 2 1909 MDT-- "The Cosby Show" (PTA: AB, SK.)
" " " " ch 4 1915 MDT-- "The A Team" (PTA: " " . CFRN-3, CFQC1-3 also in.)
" " " " ch 3 2100 MDT-- logo (see drawing 3) (PTA: E. KAAL-6 came in at 2124.)
Tue 9 Jul Es ch 2 1405 MDT-- begin "Nanny and the Professor" (WSIL-3 in at 1300, KTBS,1430;
Sat 20 Jul Es ch 2 0950 MDT-- full CBP, no ID nor any other info. (KITV-3, KOET-3 in.)
Tue 2 Jul Es ch 3 1115 MDT-- "Sesame Street" (PTA: ND,MB,SK. CBWFT also in.)
Sun 4 Aug Es ch 2 1930 MDT-- ad- "Royal Le Page" with phone #s: 555-2368 and 268-????.
(PTA: MB,SK. KGFE-2 also in.) (sounds French to me, probably CBWFT7, Kenora, ON. -RG)
(by the way, phone numbers beginning in "555" yield directory assistance and are frequently
used in TV shows and movies as fictional phone numbers.)

TV IDs:

Bill Nolan: (11/85 CCI.)
1985: Tue 2 Jul Es ch 2 2052 EDT-- Documentary about India. (KUSD, SD. The show was "Nova"
- Michael Parks.)
Mon 15 Jul Es ch 2 1750 EDT-- SS, ID as "CTW", ad- "Alka-Seltzer". (John Combs points
out that there is another ch 2 in D.R., in Santo Domingo, HIJB. with more power than HIMQ2.)
(I still think WKAQ is our prime suspect. -RG)

Randy Miltier: (11/85 CCI.)

1985: Thu 30 May Es ch 2 1645 PDT-- "Wheel of Fortune" and ads and promos (see 11/85 CCI.)
(not KWGN, they have no news. KNOP has mx at 6 & 10 but do they have Skip Baldwin?? -M. Parks)

Jim Pizzi: (11/85 CCI.)

1985: Sun 26 May Es ch 5 2240 MDT-- "Family Feud" (WMAQ. -Michael Parks.)
" " " " ch 4 2300 MDT-- and "At Issue" (WHBF carried this Sunday nights a few
years ago, maybe they still do. -Michael Parks.)

FM IDs:

Scott M. Hood, Dean Jr. College, Franklin, MA 02038-1994.

1984: Sun 4 Nov Tr 100.1 1910 EST-- FF (PTA: E'n Canada.) (there are several, I think
CBP8 in Trois Rivières, PQ is most likely because of power-)

From Beverly, MA.:

1985: Fri 7 Jun Es 102.7 1245 EDT-- religion. (PTA: MN,WI,MI,TN,KS.) (weird PTA set, eh? -RG)
" " " " 98.1 1305 EDT-- "Paul Harvey Nx & Comment" (same PTA.)
" " " " 93.3 1415 EDT-- "Hot country hits in real stereo" (PTA: Midwest, SE'n US)
Fri 14 Jun Es 97.1 1335 EDT-- "We're Jammin'" said in "Jive"-type voice (PTA: AR,MO.)
(sounds like urban contempt to me, I have 2 U/C stations on that frequency listed,
WHRK, Memphis, TN and WQMG, Greensboro, NC. -RG)
Fri 14 Jun Es 101.1 1340 EDT-- ad- "Tall Rymer's(?)" (PTA: AR,MO.)
" " " " 95.1 1415 EDT-- ra (A/C) format: "The music's here on K-95, It's 1:17"
(Thus CDT, PTA: AR,MO. Suspect KAMS.)
" " " " 98.7 1435 EDT-- r, "Rock-99" "....Springdale" (PTA: AR,MO. Susp. KWTO.)
" " " " 94.7 1440 EDT-- "....in Rodgersville....down in Springfield.."
older announcer talking about plays that were going to be aired on the station.
(PTA: MO,AR. quite sure KMTS.)
Sun 23 Jun Es 94.9 1140 EDT-- Farm or local Nx: "...hvy T-storms....Iowa.." (PTA: IA.)
Mon 1 Jul Es 96.5 1140 EDT-- "Z-96 Hit Radio" (PTA: IL,MO,KS susp. WAZY.) (me too -RG)
" " " " 95.1 1145 EDT-- k, "....on the Q" (PTA: " " " " " " WJZQ.)
Tue 2 Jul Es 95.1 1135 EDT-- "Georgia Radio News" (PTA: GA.) (I list no 95.1 in GA.-RG)
Mon 8 Jul Es 97.3 0945 EDT-- "The new 97-Rock in the Tri-Land area" (PTA: GA. susp WJAD.)
" " " " 102.9 1030 EDT-- r, "Hit Radio" (PTA: S,SE.)
" " " " 102.9 1030 EDT-- k, (PTA: S,SE. Any others besides WMSI?) (Scott, when
you say "PTA SE." do you mean to say you think the signal originated southeast of
your location or in the southeastern part of the U.S.? In this column a simple direction
only is taken to mean direction of signal (usually antenna direction.) -RG)

TV IDs:

Scott M. Hood, Dean Jr. College, Franklin, MA 02038-1994. (From Beverly, MA.):

1985: Thu 23 May Es ch 2 2350 EDT-- "The Jeffersons" (PTA: OK.)
Fri 24 May Es ch 2 1530 EDT-- sounded like "WNSW", + offset.
Tue 11 Jun Es ch 3 0930 EDT-- "TV worth watching, WPRI(?) suspect WEDU.
(Definitely PBS. WPRI is commercial ch 12 in Providence.-RG)
Thu 13 Jun Es ch 3 1140 EDT-- "The Young and The Restless" (CBS) 1 hour EARLY!! (PTA: SE)
Sun 23 Jun Es ch 4 1005 EDT-- CBS, calls sounded like "WNB1" (PTA: IN,MO.) (WCBI-MS? -RG)
Tue 9 Jul Es ch 3 0915 EDT-- "The Love Boat"
Sat 13 Jul Es ch 3 1050 EDT-- auction or pledge drive, phone # 333-8696. (PTA: GA,SC.)
(write WEDU. -RG)
Wed 17 Jul Es ch 3 1505 EDT-- "Bugs (Bunny) And Friends"
" " " " ch 2 1515 EDT-- PBS, Computer/Medical pgm, + offset.
Mon 29 Jul Es ch 3 1945 EDT-- "Taxi" (PTA: Midwest.)
" " " " ch 3 1945 EDT-- "Wheel of Fortune" (PTA: " ").
Tue 30 Jul Es ch 3 1145 EDT-- Ballet, Opera or Dance pgm. PBS?
Thu 1 Aug Es ch 2 1900 EDT-- "Wheel of Fortune" (+ offset, PTA: SE.)
" " " " ch 3 1905 EDT-- "Wheel of Fortune" wx advisory for Carolina coast.
(PTA: NC,SC,GA. suspect WMAI.)
" " " " ch 3 1935 EDT-- "MacNeil/Lehrer Newshour" (PBS) (PTA: SE. suspect WEDU.)
" " " " ch 3 1055 EDT-- "Powerhouse" (PBS) suspect WEDU.
Mon 5 Aug Es ch 3 1340 EDT-- ABC, ad for something in Springdale.
Tue 6 Aug Es ch 2 2020 EDT-- PBS, " " logo., + offset. (Definitely WMAB, Ackerman,
Miss. -RG)

Michael Parks, Route 1, Box 103, Amery, WI 54001.

1985: Mon 24 Jun Es ch 6 1501 CDT-- "Dallas"
" " " " ch 3 1504 CDT-- "Muppet Show" ad- "Carpetmart" ph# 884-9246. logo
with red 3 in white circle (see drawing 1).
" " " " ch 3 1531 CDT-- "Diff'rent Strokes"
" " " " ch 3 1531 CDT-- "Tom and Jerry"
" " " " ch 2 1535 CDT-- "Smurfs"
Fri 28 Jun Es ch 3 1036 CDT-- "Dukes of Hazzard" (PTA: TX.)
Tue 2 Jul Es ch 2 1033 CDT-- "Match Game" (PTA: S, SE.)
" " " " ch 2 1155 CDT-- "Reading Rainbow" (PTA: S,SE.)
" " " " ch 2 1512 CDT-- "Little House On the Praire" (PTA: S,SE.)

CCI- unidentified DX.

March, 1986.

TV IDs:

Robert Grant. (8/85 CCI.)

1985: Fri 10 May Es ch 3 1745 EDT-- "Little House O/T Prairie" (KOTA. -Michael Parks.)

" " " " ch 5 1755 EDT-- "He-Man" (KIVV. -Michael Parks.)

Mon 27 May Es ch 5 1300 EDT-- "Neon Edition" and ch 5 logo. (Definitely KHAS, the logo appears in TVG. -Michael Parks.) (TNX! This bags a new one for me that I have been trying for years to get. -RG) (A humorous note- The ad for KHAS news reads: "If you watch the news on a distant TV station, You are missing what's happening locally!")

Fri 7 Jun Es ch 3 1835 EDT-- "Jeopardy" (KOTA. -Michael Parks.)

Sat 8 Jun Es ch 3 1357 EDT-- "Market to Market" (a PBS, probably KOET. -Michael Parks)

(11/85) Thu 8 Jul (?) Tr ch 5 0335 EDT-- missing child slide. (Definitely WMAQ. -Nathaniel Ely.)

" " " " Tr ch 8 0425 EDT-- "CNN Headline Nx" (WQAD. -N. Ely & M. Parks.)

" " " " ch 7 0430 EDT-- end "The Dating Game" (WIS. -N. Ely & M. Parks.)

(Michael Parks points out my error that 7/18 is Thursday, not Friday. Now I am not sure if I logged these on Thu. 18th or Fri. 19th but I guess it doesn't matter. -RG)



DRAWING 1



DRAWING 2



DRAWING 3

I saw very heavy Au hash on the seventh and eighth of February. No IDs could be made, however. While this column is in the mail I will be giving the mysterious "Canis Majorids" MB I saw last year a Sirius effort (sorry, I couldn't resist, hi.) 73.



PHOTO-NEWS

David J. Nieman
12284 Nice Road
Akron, NY 14001
U.S.A.

March starts off with:

Nate Ely - Madison, WI



CKND-2
Brandon-Minnesota, MB
687 mile meteor-scatter
seen Dec. 6, 85

[rece 1-9-86]

[ne]



in
cold
storage

[rece 12-31-85]

[ne]

WESTERN TV-DX

Fred McCormack
Box 5221
State University Sta.
Fargo, ND 58105

March 1986

Deadline: 4-10-86

New New Mode Tent. - t Unidentified - unid S/On - + S/Off - =
ID Color Bars - @ Unid Color Bars - % IHTP - # Misc. Test Patterns - &

William Draeb, Ellis St., Rt. #2, Kewaunee, WI 54216.

CST

Equipment: 7' Finco dish, B-T CMA-Ub preamp @ 93', .750 cable. Stacked Finco high band yagis with B-T AB-3 (tube type) preamp @ 100' with RG/11 cable. Second tower, 40', with Winegard CH-4026 (lo-band) and Winegard SC713 (hi-band) yagis. Hi-band uses AB-300 preamp. Zenith 14N22 table model 23" b&w (1971) with B-T BTU-2s UHF converter (used for UHF and also the stacked hi-band yagis) and Zenith 16J20 19" b&w (early 60's) (used with antennas on 40' tower), and Panasonic 9" b&w portable.

November 1985

5 Es 2100 KENW 3 NM
KAMR 4 TX
6 tr 0555 Central IL UHF's
0640 KDNL 30 MO 432
KNLct 24 MO

December 1985

21 Es 1830 unids chs 2-6 s
(LA tentatively
on chs 2, 4, 6)

January 1986

20 tr 2100 WDRB 41 KY 437
WGRB 34 KY

20 tr 2144 WKLE 46 KY 473

2156 WKPC 15 KY 437

21 tr 0600 WNED 17 NY 445

WUTV 29 NY 445

WSEE 35 PA 405

0730 CIII22 22 ON

CFMT 47 ON 410

That's the extent of the DX for now. I think there will be more frequent tropo openings coming though, I hope.

Local WSCO-14 has extended their broadcast day a bit. They used to sign off at 2215 seven days a week, but now they stay on until 2300. I don't know where they're getting the financial support to do so. Every fund raiser they had, they came up way short. The last one they raised about half of their goal. They are also experimenting with picking up an off the air signal for re-broadcast from WVCY-30 which is about 160 miles away. They have four Channel Master 7 foot dishes stacked 2 x 2 at 350 feet on their tower. The station manager said they aren't all "tuned up" and working right yet because of the cold weather we've had lately. Along with the dishes, they're using various preamplifiers, etc. The brand names weren't mentioned. I think they're expecting too much if they think they're going to get a usable signal for rebroadcast. I wrote a letter to them saying as much, but no response.

Not much local station news that I haven't already mentioned. A couple of weeks ago WXCZ-32 was off for five days straight. I called them up to find out why and was told they had "major transmitter problems."

That's about all for now. 73's, Bill

(Thanks for the report. fm)

PHOTO-NEWS continued



...our last DX picture is from:

Jim Pizzi

Lawton, NM

KSWO-7
Lawton, OK
294 mile tropo
seen Nov. 29, 85

[rece 12-21-85]

[jp]

TV-DX

A

STORY

ABOUT CLOSE ENCOUNTERS

BY MICHAEL HOLLIS

I assume all TV-DXers get introduced to this fascinating hobby through various sources. (i.e., shortwave DX, amateur radio, or a friend being a TV-DXer) My real introduction to TV DXing came as a mere accident. My electronic hobbies had caused me to cross it's path numerous times but it wasn't until sometime later that I learned what TV DXing was really all about.

Well, starting from the beginning, during the summer of 1968, I was working with a television repair shop as a summer helper in order to make some spending money. I had selected this type of work because of my electronic interests as a Novice Amateur radio operator. During this summer I spent most of my time installing and repairing television antennas. I lived in a small northwestern Alabama town (Russellville) where most of our customers had to have large antenna systems with rotors to receive good reception. I especially remember a close encounter with TV-DX early one June morning. After installing a large VHF yagi and UHF 8 bay bowtie with rotor on top of a 50 foot mast for one of our customers, my boss and I went inside to check out the reception. Well; the VHF reception to the southeast (Birmingham, AL channel 6 and channel 13) was normal. We rotated the antenna to the north to check the UHF reception (channel 15 Florence, AL) when we noticed another station on channel 6 before switching over to the UHF band. Interested in this station, we aligned the antenna for the strongest signal and learned we were watching a station from Oklahoma. The people who we installed the antenna system for were impressed but my boss and I couldn't explain why a station from Oklahoma was rolling in that particular morning. On the way back to the shop; I thought about this unusual occurrence but still didn't know I was witnessing something TV-DXers call, tropospheric bending (tropo).

A year later, my parents moved to Chattanooga, TN where I finished high school. To my delight they bought a house on top of a high ridge which was excellent for FM and television reception. During 1969 and 1970 I had several encounters with both FM and TV DX. I had bought an FM stereo receiver and put up a 10 element FM yagi with rotor to listen to rock and roll stereo stations from Atlanta, GA (WQXI and WZGC). Atlanta was over a hundred miles away and I began to notice reception was better at night and early morning hours than during the day. Since I was in school most of the day, this didn't really present a problem. A fellow amateur radio operator suggested that I should try to receive Atlanta television stations as well; especially the independent station on channel 17 (WTCG) because of my high elevation. Also about this time, a new UHF television station was being built in Chattanooga (WRIP channel 61 now WDSI) which would require an outdoor antenna for good reception. After several weeks of convincing my parents we would need an outdoor UHF antenna; they agreed to let me install a 4 bay bowtie with our small VHF yagi and a rotor. I didn't mention that I was also

continued

TV-DX A Story About Close Encounters

interested in trying to receive the Atlanta television stations, especially channel 17. While my parents were out of town one weekend, I put-up the 4 bay bowtie so I could stay up late and watch Atlanta TV. The first night things were great with both VHF and UHF reception out to 150 miles. I thought to myself; why hadn't I thought of this before. Well; the next night, reception was not as good with even the Atlanta UHF stations snowy and fading at times. I thought to myself there must be a wire loose or something wrong because the reception the night before had been great. During the next year I stayed up late several times after the local stations signed off to catch nearby cities like Knoxville, Birmingham, Memphis and Nashville but never caught any real good tropo opennings. Of course, I still didn't know what tropo, E-skip and all that stuff was about.

My next encounter with TV-DX came when I was stationed at Ft. Campbell, KY in 1976 with the army. I got a brain storm that my previous attempts with long distance television reception at my parents house may have failed because I was using modest antennas. I thought it would be great to be able to receive TV from Chattanooga which was about 160 miles away and be able to catch up on local news. I went to a local electronics distributor and bought the biggest VHF yagi available which happened to be the Channel Master Crossfire model 3617. I was disappointed again because a hundred miles was about as far as this antenna would reach. I tried adding a pre-amp to the antenna and found that only on certain occasions were stations from Chattanooga really watchable at 160 miles. Also, there was an independent UHF station in Nashville on channel 17, WZTV which was about 60 miles away. I should have better luck with something closer. I went again to the electronics distributor and bought the biggest UHF antenna they had which was a Finco model P-7. I was disappointed again as WZTV was transmitting with low power at that time and I couldn't raise my antenna high enough to get a good signal. I began to say to myself; this long distance television reception is for the birds. About a week later, I was over at a friends house watching TV with rabbit ears and we started receiving a spanish speaking station on channel 2. We watched for a few minutes in amazement. I was thinking to myself; this is crazy. I can hardly receive a good picture from a station only 60 miles away with a big antenna and my friend is receiving a Mexican television station with only rabbit ears. I'm confused!!!!

Of course the answer to any TV DXer was easy but still I knew nothing about TV DXing propagation. Later that year while looking through a copy of Communication World magazine which is now extinct, I stumbled across the Worldwide TV-FM DX Association. So I wrote to the club and got a sample VHF-UHF Digest. I remember the first time I looked at the VUD. A lot of it was like Greek to me but that was just the real beginning for me with TV DXing. Now after nine years with lots of stations logged, many photos and qsls. I wish I had stumbled onto the WTFDA sooner. Even after all these years; my TV DX enthusiasm hasn't wavered yet. I just sometimes think of all the TV DX I missed all those years.

Worldwide TV-FM DX Association

EASTERN TV-DX

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John F. Combs, prop.
2969 Herschel #7
Jacksonville FL 32205
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NEW ADDRESS/PHONE
DEADLINE: 1st
(EST)

March 1986 A.D. (NOT SOLD IN STORES)

Dave Nieman, Akron, NY 14001-9529

November 1985

5 Es 1757 KIMI-3 1A 720
1931 KTVS-3 CO 1250
7 Es 1230 KSNW-3 KS 1050
30 Tr 1615 WBNX-55 OH 205
Akron (testing)

December 1985

21 Es 1838 KTVS-3 CO 1250
29 Es 0834-0957 ch. 2 & 3 no IDs

Equipment: 1982 Zenith 12" B&W w/t Teknika 6510 tuner. Antennas: C/M 1113 Quantum w/t C/M 0096C cartridge amp at 12' AG (802' ASL). C/M 4251 7' dish w/t Bionder-fongue CMA-Lb pre-amp on crank-up tower at 41' AG (831' ASL), using RG-11 cable.

I'd like to thank Walter Patton who IDed my mystery channel 16 (Nov. 1985 VUD) as CBFT-9 Mont St. Michel, PQ (about 100 miles north of Ottawa, ON).

I'm temporarily using the Channel Master 1113 Quantum and 0096C pre-amp as winter in western New York is no time to be changing antennas. (No weather comments John).

(Hey, winters in North Florida aren't anything like those in your area, but they're not all sunshine and warm ocean breezes either! Besides, I'll take 20° and snow over 45° and rain any day. The latter feels much colder to me--jfc)

Robert Goodman, 2030 Hering Ave., Bronx NY 10461-1711 (EDT)

September 1984	June 1985	June 1985
22 Tr 2232 WBOG-16 MD 175	7 Es 1301 WRBG-3* TN 940	23 Es 0847 WEDU-3 FL 1005
June 1985	1740 unID-6	1118 WBAY-2 WI 755
7 Es 1231 KDLH-3* MN 995	1750 WCCO-4 MN 1010	August 1985
		17 Tr 2230 WGBB-49? PA T

"Except for the two receptions at Valhalla (designated by *), all loggings were here. Can it really be this long since I reported to Eastern TV? Not that much there, really, unless I count the loads of unIDs. These include a 6/22/85 occasion when I got a good enough null on WGBB-2 to get full video DX through them. That wasn't as astounding as the WBAY-2 logging the next day, when I heard the audio through the local--not bad for "ears" in town! Also heard during the 9/22/84 tropo opening was a local ham 2-m repeater which a certain Rufus (KA4RPZ) was making with full quieting from Greenville NC."

(Nice to see you back in the column, Robert! Don't fret about the short report--I think getting ANY DX in New York City and environs is a feat in itself!--jfc)

Ed Frye, 317 Hooker Avenue, Poughkeepsie NY 12603-3111

"We are now preparing for our move to L.A.; therefore, this shall be my final contribution to Eastern TV-DX. With so much to accomplish between now and moving day, DXing is out of the question! I have, instead, spent those milder spells of January weather taking down my UHF/FM antenna system for shipment to CA. Since we've been counting on a move, I purposely designed my system to be "retrievable"--that meant saving all the cartons in which my equipment originally came, too! (Smart move--jfc) Regrettably, I'm leaving behind my CH-5200 VHF antenna and rotor. The elements of Chromstar antennas, once deployed, are virtually impossible to fold up without damaging either the equipment or one's fingers! Besides, the move will enable me to try out a new VHF antenna; the CH-5200 is 7 years old and showing it! For local UHF viewing during the transition, I installed one of those unique-looking Radio Shack antennas, Model 15-1627 ("4-bay") in our attic with the CM 7477A preamp. This antenna, originated by Antennacraft as the "Hoverman," is substantially reviewed in the excellent Howard Sams book "TV Antennas and Signal Distribution Systems." I have used several of these inexpensive antennas under various conditions and can verify the author's claims of outstanding results....In closing, here are my Poughkeepsie DX totals: E-skip 14, Domestic VHF Tr 21, Domestic UHF Tr 40, Canadian VHF Tr 3, Total States 17, Total Provinces 1. Best UHF: WGVF-23 (345 mi.). Best E-skip: KBME-3 (1370 mi.). Best VHF-hi Tr: CBQFT-9/CJOH-13 (270 mi.). 73's to everyone; see you in the "Western" pages, hopefully soon!"

(Good luck with the move, Ed, and thanks for all your contributions to this column. As for the "4-bay" UHF antenna, I too am a firm believer in the value of this extremely inexpensive item. They are easy to handle, lightweight, and yet deliver fine results. Moreover, they are well-suited for "remote" uses (like mountaintop DXing) and other temporary uses, as well as for apartment/condo dwellers who are restricted to indoor or attic antennas--jfc)

EASTERN TV-DX

Anthony Mann, Dept. of Physics, L.S.U., Baton Rouge LA 70803-4001

March 1986

"My visit to Australia coincided with some particularly intense summer Es conditions, notably over Xmas-New Year, when the MUF was over 144 MHz, at least over Eastern Australia. Two-hop Es at 144 MHz was observed briefly Dec. 26 at 2203 GMT from New Caledonia into Adelaide (then regular 1-hop into Brisbane)."

"From my parents' house in Perth I began observing Dec. 17 using a JIL SX-200 scanner and a CM 3617 antenna at 26 feet. Double-hop from Australian Ch. 0 and Ch. 1 xmtrs (1700-2300 miles) was in almost daily while multi-hop from New Zealand Ch. 1 and Ch. 2 xmtrs (3000-3400 miles) was noted Dec. 17, 24-31 (except 26) and Jan. 1, 7, 8. For me, Es peaked on Dec. 29 and 30. On Dec. 29, Malaysian Chs. E2, E3, E4 (approx. 2500 miles) wafted in and out for 3 hours mid-afternoon while another double-hop opening to the east (single-hop at FM) was in progress. Initially, Chinese Ch. C1 vision (49.75 MHz) was present, indicating 4000 mile Es northward. However, Dec. 30 brought my most distant Es reception to date: KVZK-2 American Samoa at 4700 miles. This was between 0300 and 0420 GMT during an extremely intense opening to the east, starting at 0630 and lasting past 2300 (TVQ still in; all other Ch. 0's and 1's had signed off). The 59.75 MHz audio was quite strong and from the tape I was able to dig out "Saturday Journal" and the stn ID at 1144 "In American Samoa you're watching KVZK Television, channel two." KVZK-2 was received earlier that morning on color bars by TV & FM-DXer Todd Emslie of Sydney (at 2800 miles). Strangely, the Es clouds responsible for much 144 MHz DX and hours of low-powered FM-DX over Eastern Australia, resulted in only a few short-lived FM openings to Adelaide (1300 miles) at my QTH."

"This is probably my last contribution to your column and the WTFDA in general as I'm moving back to Australia (on March 10) where my address will be: 15 Tweeddale Rd., Applecross, W.A. 6153, Australia."

(We're sorry to see you go, Anthony, but I guess it's always nice to go home, regardless of what Thomas Wolfe says! Please do keep us posted on your activities; after all, this is the Worldwide TV-FM DX Association, and we don't often get reports from overseas. Especially reports as exciting as the above--probably making Jaded DXers seethe with understandable envy! Best of luck to you in your DXing and in your work!--jfc)

John F. Combs, 2831 Selma, Jacksonville FL 32205 (LAST REPORT FROM THIS QTH) (EST)

January 1986	January 1986	January 1986
3 Tr 0605 WTAT-24 SC 216	6 Tr 0922 WNSC-30? SC T	14 Es 2130 KFDX-3 TX 1016
0605 WATG-26 (SC) 215	0934 WLFL-22 NC 409	(MUF at least 92 MHz)
5 Es 1145-1228 unIDs-2-6	1944 WTAT-24 SC 216	21 Tr 2330 WHMC-23 SC 294
6 Tr 0820 SC U's 24,25,35	1944 WRJA-27 SC 261	2330 WJKA-26 NC 335
0820 WPTT-28? NC T	12 Tr 0630 WTAT-24 local qual.	2330 WRJA-27 SC 261
0820 WTVI-42 NC 343	0630 SC U's 26,35,49	2330 WOLO-25 SC 263
0915 WPCQ-36 NC 347	2330 WEVU-26? FL T	2330 WTAT-24 SC 216
0915 WJPM-33? SC T	13 Tr 0030 WTVX-34 FL 234	2330 CCI Chs. 20,26
0915 WLTN-19 SC 262	14 Es 1844+ Noted on 2	(Others--no time...)

CHANGE OF ADDRESS: As you hopefully have noted in the heading of this column, my address is changing. The new QTH is, unfortunately, a 1st floor apartment. Looks like I'll have to do whatever I can do with indoor antennas. Oh well--maybe the summer Es season will be a winner this year!! Interesting to note WTVI-42 on 1/6 in with a watchable signal while WPCQ-36 not present at all!! 42's new xtr/QTH/power seem to help--I've never seen more than a very weak signal from them in the past. Any members having good ideas concerning indoor antennas, please write!

WMTV UPDATE: I received another letter from the operator of pirate station WMTV in Delray Beach FL. This is the last bit of publicity I'll give these guys--OK? I quote him: "We are a true pirate--unconventional to the bloody end! Some of our more noted hijinks include running our 96.3 MHz xtr from the belly of a Cessna at 1500 feet! Also last October we shut down a local AM stn and loaded our 7,425 KHz xtr on 2 of the stn's arrays. That caused quite a stir! (Hmmm... can't imagine why--jfc) WMTV Channel 3 TV is an XXX-rated format featuring the best in erotic video available, always after midnight of course." Of course, A bit flaky; still, the 96.3 FM is a good challenge to the FMers, and the Ch. 3 might just be seen if you have Es late at night to FL, have an open Ch. 3 locally, and WEDU-3 is off-air. From the description of the programming, you probably wouldn't mistake WMTV for WEDU, hi!

I HOPE... that the last part of this column is legible. My good ribbon cartridge ran out, and I was forced to use a nylon ribbon that has seen better days. The other good film ribbons are packed. Here's hoping that some of that good Australian DX drifts our way!! It's been real...JOHN.

WMTV FM STEREO 96.3
WMTV AM 1610 KHZ
WMTV CH 3 TV
WMTV SW 7.4-7.45



WMTV
FREE RADIO'S BEST ROCK

(Above logo from WMTV's
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WTFDA H.Q.
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FOR SALE - Channel Master #0236C Spartan II amp, VHF/FM/UHF 300-ohm w/split VHF/UHF inputs, switchable, tuneable FM trap. Gain: VHF 17 dB, FM 15, UHF 22 dB, 3.0 to 4.0 dB noise figure, Slightly used, very good condition. \$40.00. Rich Wertman - 315 Pine St. - Lockport NY 14094. (716) 434-3988.

FOR SALE - Sony SRF A-100, AM stereo-FM stereo radio with batteries, no AC adapter included. Has AM stereo A-B switch for C-Quam and Kahn systems. No headphones, but has headphone jack and built in stereo speakers. Like new, \$100 (no SCA modification built in or on) from Bruce Elving - 241 Anderson Road - Esko MN 55733-9413. (218) 879-7676. Price includes shipping.

FOR SALE - Winegard DA-8150 82 channel post amp, FM also. Gain VHF 17 dB, UHF 21 dB. Max. noise figure 3.3 dB. Brand new condition; \$50.00 plus shipping. Rich Wertman - 315 Pine St. - Lockport NY 14094. (716) 434-3988.

FOR SALE - Bumper stickers for the promo enthusiast. \$1.00 for 5, \$1.50 for 10, \$3.00 for 20 or \$5.00 for all 35, plus postage. must sell. Eric Bueneman - 836 Lamplight Lane - Hazelwood MO 63042-3407.

FOR SALE - Channel Master #7478 Super Titan amp; UHF with VHF feed thru if needed. Definitely a quality commercial MATV piece of equipment. Noise figure 3.0 dB, gain 28 dB. Brand new, \$65.00. Rich Wertman - 315 Pine St. - Lockport NY 14094. (716) 434-3988.

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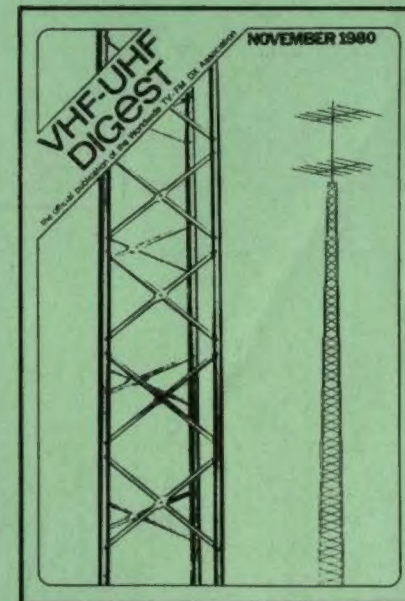
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